# INFORMAL DIGITAL LEARNING OF ENGLISH: THE CASE OF KOREAN UNIVERSITY STUDENTS

BY

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DISSERTATION

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## ABSTRACT

With a changing ecological environment of second language (L2) learning and teaching, as well as its huge potential for out-of-class L2 learning, an increasing number of Teaching English to Speakers of Other Languages (TESOL) and Computer Assisted Language Learning (CALL) researchers and practitioners have become interested in 'informal digital learning of English (IDLE)' in various English as a foreign language (EFL) contexts.

To date, however, it is still inconclusive whether or to what extent the *quantity (frequency)* and *quality (diversity)* of IDLE activities used by EFL students can contribute to English learning outcomes. Further, research on factors that influence the learners' Willingness To Communicate (WTC) when engaging in IDLE activities has yet to be fully clarified by empirical research with L2 learners in EFL contexts. To address these research gaps, data were collected using mixed methods through a questionnaire, semi-structured interview and English learning outcomes from 77 Korean university students enrolled in 15 different EFL classes of three separate universities.

This study found four key results: First, contrary to earlier findings, this study found that quantity of IDLE was not related to vocabulary scores. It suggested that the quality of IDLE was significantly, positively associated with vocabulary outcomes. Second, IDLE quantity was significantly correlated with affective variables (i.e., confidence, enjoyment and anxiety) and a standardized English test (i.e., TOEIC). In contrast, IDLE quality was significantly correlated with not only the affective variables and standardized English test but also productive language outcomes (i.e., speaking and productive vocabulary knowledge). Third, among the six English outcome variables investigated, enjoyment and anxiety were identified as significant predictors of IDLE quantity, whereas anxiety, speaking, and productive vocabulary knowledge were significant predictors of IDLE quality. Finally, sociopolitical variables (i.e., L2 communication

practice and social anxiety), contextual variables (i.e., familiarity with interlocutors and communities), and an individual variable (i.e., L2 self-confidence) are major sources of influence on participants' L2 WTC. Additionally, these five variables interplayed simultaneously during L2 communication in the IDLE context. Four individual cases were also provided as evidence of these statistical findings and capture an overview of the breadth and depth of Korean EFL university students' engagement with IDLE activities.

These results lead us to the conclusion that the frequent engagement in IDLE activities may not automatically guarantee successful L2 vocabulary gains. Rather, engagement with varied types of IDLE activities that combines both form- and meaning-focused language learning is essential for achieving L2 vocabulary acquisition. Additionally, we can gain more in-depth insights into how IDLE quantity and quality can make a unique contribution to EFL learners' overall English outcomes and determine how educational stakeholders (e.g., institutions, teachers, and parents) can help.

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# CHAPTER 1

# INTRODUCTION

## 1.1 Research Motivation

A range of new digital technologies has influenced the way young students live. Today's adolescents, who have grown up with technology, play and socialize in a digital world (Ito et al, 2009). For example, 96% of the young Americans aged 18-29 own mobile devices in comparison to the total average (77%) of other age group (Rainie, 2016). Nearly 90% of Americans aged 18-29 use social networking sites (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). Social media and mobile phones play a major role in teens' (aged 13-17) romantic lives as they hang out with their significant others using text-messaging (92%), social media (70%), video chat (55%), and talking while playing video games (31%) (Lenhart, Anderson & Smith, 2015). This social phenomenon has drastically changed the way young learners learn (Prensky, 2001). Unlike previous generations, today's young learners have adopted different learning styles and strategies using technologies. Junco (2012) showed that social media such as Facebook can help university students' academic outcomes as they can gather and share information.

In the digital age, higher education institutions feel a strong need for reinventing their curriculums to meet the learning needs and preferences of today's young learners, for the purpose of enhancing their employability (Bridgstock, 2009, 2016). As more and more students engage in informal learning thanks to a wide range of digital tools (e.g., Skype, educational mobile apps, virtual space), universities build programs to best aid students learning in a digital space. One prime example is the rise of online courses, such as mass open online courses (MOOCs), which can even challenge conventional colleges and universities (Bowen, 2013). To meet students' needs, faculty members make efforts taking on new roles in developing

innovative pedagogies by linking informal learning experience with technology (e.g., social media, mobile phones, online games) with formal instruction (Zimmerman, Gamrat, & Hooper, 2014).

In the field of TESOL and Applied Linguistics, a growing number of educators have turned their attention to informal language learning (e.g., Benson & Reinders, 2011; Richards, 2015). While some look at self-directed, informal English learning (e.g., Gao, 2009, 2010; Hyland, 2004; Pickard, 1996; Reinders, 2014), others have begun examining L2 learners' informal, digital English learning (e.g., Lai, Wang, & Lei, 2012; Lai, Zhu, & Gong, 2015). Recently, Chun (2016) suggests that we are at (and moving toward) *ecological CALL*, by which L2 learners can acquire English more readily outside the classroom due to constantly evolving technologies such as mobile and wearable devices.

The informal, digital learning of English has received positive attention in the English as a Foreign Language (EFL) context, as this helps address limitations of class instruction (e.g., large class-size, exam-driven curriculums and instruction) and enhance language acquisition (Benson & Reinders, 2011; Nunan & Richards, 2014; Richards, 2015). The informal, digital learning of English is strongly underpinned by the merits of multimodality, in that several types of sensory integration (e.g., sound, visual, and video) help L2 learners improve their understanding and delivery of their messages (Dressman, 2016a; Van Leeuwen, 2015). Thus, studies of L2 learners' use of technology outside the classroom have rapidly grown due to technological advancement and its growing affordances, such as blog (Trajtemberg & Yiakoumetti., 2011), social media (Alm, 2015), videoconferencing (Lee, Nakamura, & Sadler, 2016), mobile apps (Godwin-Jones, 2011), the 3-D virtual environment (Sadler, 2012), digital games (Godwin-Jones, 2014; Sylvén & Sundqvist, 2012), and TV/movies (Webb, 2014). Several

studies have also attested to how such an informal, multimodal language-learning environment can be beneficial to language learners in terms of confidence, oral proficiency, vocabulary size and knowledge and test grades (e.g., Lai et al., 2015; Sundqvist, 2009, 2011; Sylvén & Sundqvist, 2012).

### 1.2 Researcher Background and its Implications

In education-crazy South Korea, Korean parents are now suffering from 'English fever.' *Los Angeles Times* reported that in order to secure their kids' English speaking skills, Korean mothers are practicing English for their unborn children, hiring expensive English speaking tutors for toddlers, sending preschoolers to English-speaking countries or preschools, and even turning to "linguistic surgery" – undergoing a surgical procedure to correct a 'tongue-tiedness' condition in order to better pronounce English 'l' and 'r' sounds (Demick, 2002).

As a former Korean secondary teacher of English, however, I consider English education of Koreans as 'high-cost and low-efficiency.' Although learning English is a national obsession (e.g., $15.6 billion annually for English tutoring, ten years of compulsory English learning and the world's largest number of TOEFL examinees annually), its learning outcomes are not impressive: Korean TOEFL speaking scores ranked 136 out of 161 countries (Kang, 2009; Shim & Park, 2008). It is no wonder that Korean parents and students do not trust English teachers in public schools, but spend a huge amount of money and time in the private education market (Song, 2014).

This study developed after I quit my English teaching job in Korea and traveled to Morocco in May of 2014 to work with my advisor, Dr. Dressman, to plan his Fulbright Senior Scholar project on English learning at three Moroccan universities. During this trip, I learned that Morocco and Korea have much in common in terms of similar histories of colonization, English

language policies for their economic development, and English as Foreign Language (EFL) context. However, I was surprised by the fluency and communicative competence of nearly every Moroccan student with whom I spoke, even though they receive only three or four years of instruction in a public-school system that is generally lacking in resources under unfavorable teaching and learning conditions (Ennaji, 2005).

In contrast, the English proficiency of Korean university students is less impressive. TOEFL iBT scores also support that Moroccan test-takers performed better than Korean on the speaking section: In 2007, Moroccan (19) vs. Korean (17) and in 2015, Moroccan (21) vs. Korean (20) (Educational Testing Service, 2007, 2015). Although the difference may seem insignificant, Moroccan's oral performance is still remarkable since Korea has recorded one of the largest number of TOEFL examinees worldwide since 2004 and virtually all Korean universities require students to obtain TOEIC or TOEFL scores (Choi, 2008; Educational Testing Service, 2004, 2005). How can this be? How do under-resourced Moroccan university students excel in oral communication whereas fully resourced Korean students struggle to speak, despite similar colonial histories, English language policies, and EFL contexts (Dressman, Lee, & Sabaoui, 2016; Ennaji, 2005; Park, 2009a)?

Although several variables (e.g., geographic location, learning style) may influence the English acquisition of Moroccan students, the preliminary data suggest that they actively engage in informal, digital language learning independently of their teachers, while Koreans are heavily dependent upon formal in-class learning (Dressman, 2016b; Dressman et al, 2016; Lee, 2016). More specifically, more than 50% of Moroccan students' knowledge and skill in speaking English was a result of informal, autonomous, media-based activities. In particular, the top proficient group (which is fluent in speaking and listening) responded that 70-85% of their

English had been learned and acquired outside of the classroom by creating an "invisible university" of English learning materials for themselves. That is, a multitude of experiences outside of formal classroom settings, such as access to media and online sources in the target language, stand to shape how readily Moroccan university students attain English fluency.

In the Korean EFL context, where the "digital divide" does not exist among young Korean students in this "tech-savvy" and technology-rich" society (e.g., almost every South Korean university student has a smartphone), can we learn lessons from the Moroccan EFL case and overcome this unfavorable language learning condition by implementing a wide range of technological resources (e.g., Twitter, social media, YouTube, smartphones) in language education? In other words, can Korea take full advantage of its rich resources in technology in order to address limitations of classroom-based instruction and enhance language acquisition in the EFL context (Benson & Reinders, 2011; Dressman et al., 2016; Richards, 2015)?

### 1.3 Purpose of the Research

As I have discussed so far, with the development of digital technologies and Web 2.0, second language (L2) affordance and opportunities have expanded beyond the classroom (Cappellini, Lewis, & Mompean, 2017; Sylvén & Sundqvist, 2017; Richards, 2015). With a changing ecological environment of L2 learning and teaching, as well as its huge potential for out-of-class L2 learning (e.g., Bax, 2003, 2011; Chun, 2016), an increasing number of TESOL and CALL researchers and practitioners have become interested in 'informal digital learning of English (IDLE)' in various EFL contexts[1] – e.g., Denmark (Jensen, 2017), Sweden (Sundqvist, 2009; Sundqvist & Sylvén, 2014; Sundqvist & Wikström, 2015), France (Sockett, 2013, 2014;

[1] The terms *extramural English* (Sundqvist, 2009), *online informal learning of English* (Sockett, 2014), and *out-of-class English learning* (Lai et al., 2015) may seem different (e.g., different terminologies), but in this study they are

Sockett & Toffoli, 2012), Morocco (Dressman, et al., 2016), Russia (Kozar & Sweller, 2014), Malaysia (Tan, Ng, & Saw, 2010), India (Mitra, Tooley, Inamdar, & Dixon, 2003), China (Chen, 2013; Lai et al., 2015; Sun, Franklin, & Gao, 2017), South Korea (Lee, 2017), Japan (Butler, Someya, & Fukuhara, 2014; Casanave, 2012), and Brazil (Cole & Vanderplank, 2016).

Many previous studies have discussed *quantity (frequency)* of EFL learners' IDLE activities in relation to English learning outcomes, such as vocabulary knowledge, reading and listening, and school grades (Jensen, 2017; Olsson, 2011; Sundqvist, 2009; Sundqvist & Sylvén, 2014; Sundqvist & Wikström, 2015; Sylvén & Sundqvist, 2012). Other studies of IDLE reported mixed evidence for IDLE quantity (Olsson & Sylvén, 2015), and some recent studies (Lai et al., 2015; Lee, 2017) called for attention to the *quality (diversity)* of IDLE activities that are conducive to English learning outcomes, such as anxiety, confidence, productive vocabulary knowledge, speaking, and formal testing.

To date, however, it is still inconclusive whether or to what extent the quantity and quality of IDLE activities used by EFL students can contribute to English learning outcomes. Specifically, an empirical investigation that made a comparison between the quantity and quality of IDLE activities is left almost untouched. Further, although there is now a growing body of literature that investigates L2 WTC through an *ecological* perspective, one of the most pressing issues about our knowledge of L2 WTC is based exclusively on formal classroom or extra-curricular online interaction settings, overlooking a rapidly emerging IDLE context. If there is an urgent call for "expanding CALL beyond formal learning settings" (Chik, 2013, p. 835), more effort needs to be extended toward examining L2 WTC in the IDLE context and broadening current knowledge beyond the classroom context.

Therefore, this study attempts to explore this less charted terrain with the goal of advancing our understanding of 1) quantity and quality of IDLE activities engaged in by Korean EFL learners university students in relation to English learning outcomes and 2) EFL learners' WTC while involving IDLE activities. Specifically, the study seeks to answer the following four research questions (RQ):

*RQ1: Is the quantity/quality of IDLE associated with L2 English vocabulary measures?*

*RQ2: Is the quantity/quality of IDLE associated with L2 affective variables, standard English test, and productive language outcomes?*

*RQ3: What English learning outcomes will have a positive influence on IDLE Quality/Quantity?*

*RQ4: What factors may influence the EFL learners' WTC when engaging in IDLE activities?*

**1.4 Significance of the Research**

Theoretically, this study can contribute toward advancing our understanding of the complex nature of informal language learning with technology, which is a significant, yet less explored research issue; it can also expand the current knowledge base of TESOL (Lai, 2013). Practically, the results could help TESOL instructors to better integrate certain kinds of technology use outside of the classroom into lesson plans or homework assignments, which can in turn complement in-class learning (e.g., involving more meaning-focused activities), enrich students' language learning experiences, and contribute to curricular and pedagogical innovations (Lai et al., 2015). Furthermore, this study, focusing specifically on types of activities that employ technology, is also consistent with current ecological conditions of language learning and teaching, which will provide insights to policymakers and TESOL program administrators into the kinds of changes they need to make in order to successfully prepare their students for future second language learning.

# CHAPTER 2

# LITERATURE REVIEW

## 2.1 Informal Digital Learning

### 2.1.1 Informal Learning and Digital Technologies

#### The Concept of Informal Learning

The ample literature on informal learning exists, but we have not reached a general consensus on this term. As a result, there are alternative terms with regard to informal learning, such as learner autonomy, out-of-class learning, and independent learning. Thus, the aim of this session is to explore multiple views on informal learning. Chronically, Tough (1979) conducted one of the earliest works on informal learning. The study has shown that around 70% of adult learners acquire a particular knowledge and skill as they deliberately seek help from various resources, such as peers, experts, and computers. This autonomous, informal learning approach has been increasingly accepted, as individuals must adjust to rapid social, political, economical and technological changes both personally and professionally (e.g., new products, laws, and transportations). This informal learning process takes place as he or she engages in a learning project from learning and retaining certain knowledge or skills (e.g., reading, listening) to performing some duties using that knowledge or skill. Almost 80% of the participants in this study were pursuing this type of self-directed projects. Tough also argues that instructors and professors in educational institutions are responsible for facilitating informal learning (by fostering students' abilities in selecting various methods, resources, and strategies), unlike the traditional classroom approach (e.g., the teacher-centered approach). This informal learning knowledge, which is similar to lifelong learning, can be transferred to useful professional skills

in their occupation, which requires a high degree of independent competence in planning and acting projects in a fast-changing world.

Lamb (2006) classified informal learning into two dimensions – self-regulation and self-management. Originated from cognitive psychology, self-regulation learning is closely associated with self-awareness for the learner. Successful self-regulated learners possess cognitive and metacognitive learning strategies by planning, monitoring and assessing their own learning activities. In a self-regulated learning context, teachers may still assume the authoritarian role as a 'strategy trainer' and controlling the learning content. On the other hand, self-management is more linked to the entire learning process, which encompasses self-regulated learning as well as the learning environment. Learners of self-management use self-regulated learning strategies (e.g., planning, monitoring and evaluating their learning progress) as well as choosing learning activities and resources that help improve or achieve their learning goals. In self-management learning contexts, the teachers assume the minimal role as facilitators, and help students learn independently of the teachers outside the classroom (e.g., using self-access centers). Lamb argued that self-regulation and self-management learning skills could be achieved through teachers' ongoing, systematic support in the classroom.

Raya (2006) offered a practical pedagogy for how one of Lamb's (2006) informal learning concepts – self-regulation – can be implemented in the classroom. Based on Zimmerman's (1989) definition of self-regulated learners as "metacognitively, motivationally and behaviorally active participants in their own learning process" (p. 329), Raya pointed out that journal writing could be used to nurture self-regulated learners who could set goals, adopt appropriate learning strategies, and constantly monitor/evaluate their learning process. Specifically, learners can keep a reflective journal in the following sequence (see pp. 134-135, for more details): 1) What they

know and what they do not know (e.g., self-assessment about their learning), 2) their learning experience (e.g., noticing students' learning difficulties), 3) their planning and self-regulation of learning activities (e.g., understanding the degree of autonomous responsibility for learning, and 4) debriefing the learning process (e.g., raising the awareness of their learning process).

Sefton-Green (2008) introduced four theoretical themes of literature on informal learning based on Colley, Hodkinson, & Malcolm's (2003) work (p. 243):

1. Location: Where does the learning takes place - how and whether context is a determinant of processes.
2. Processes: How learning is organized, whether there are forms of accreditation and assessment - what kind of style or pedagogic relationship is used? How is learning supported and whether it is collective, collaborative or individual?
3. Purposes: Why does the learning occur, in whose interest?
4. Content: Whether knowledge has disciplinary provenance, and how it is applied theoretically and in practice?

Sefton-Green also pointed out that growing interest has been given to the literature on informal learning in today's knowledge-based, neo-liberal society.

Black, Castro, and Lin (2015) examined informal learning from the perspective of contemporary youth. Contrary to the characteristics of formal learning (e.g., structured, hierarchically organized), Black et al. described informal learning as "more organic, less structured, contextualized, and based on activities and experiences rooted in the lives of learners...the learner operates with the freedom to determine the subject and methods of inquiry" (p. 8). Black et al. also problematized the disconnection between formal and informal learning in terms of learning context (e.g., school vs. non-school), as young students today increasingly

practice informal learning with technology devices in diverse non-school settings. Thus, contemporary school should be reshaped to connect between formal and informal learning sites for today's young learners. Empirically, Lin and Grauer (2015) developed a community-based media arts education center call GIFTS in Canada and attempted to connect between formal (where students conceptualize key concepts in a structured manner) and informal learning settings (where they produce short films in collaboration with professional filmmakers and other peers). In the process of creating the work through GIFTS, young students became more intrinsically motivated, learned more deeply through scaffolding, and acquired social skills such as collaboration.

**New Learning Ecology and Web 2.0**

As already noted a very high percentage of American students use various types of social media routinely in their daily lives. In South Korea, 99.6% of Korean adolescents use computers and 97.8% use the Internet every day and spent more time on the Internet than they do watching TV (Dong-A Il Bo, 2005). Jin and Chee (2008) indicated that Korean adolescents used the Internet to play online games, instant message, participate in social networks and online shopping, and download videos and music. This means that the Internet and mobile devices have become a part of adolescents' daily lives.

The development of new technologies and multimedia has also influenced the way we communicate and create meaning. Using technology, we use a great deal of multimodal messages such as visual, audio, and kinetic types of meaning and communicate our intended meaning to others. In this globalized world, we also combine those multimodal forms with diverse cultural and linguistic messages when communicating with people from other linguistic and cultural backgrounds. With many types of technologies (e.g., Internet and mass media)

becoming so prevalent and our society becoming more globally connected, today's young learners need to learn a new type of literacy called "multiliteracies" (New London Group, 1996). Whereas students used to learn using solely pen and paper, contemporary students should be able to process a multitude of multimodal messages in the new learning ecology such as blogs, word processors, e-mail, instant messaging, presentation software, social media, avatars, learning management systems (LMSs), and digital games to function effectively in an emerging digital, globalized society (Cope & Kalantzis, 2000). Thus, traditional literacy is no longer valid, and today's learners should master "multiliteracies."

Dressman (2016a) pointed out that multimodality, which is "combing more than one mode of communication, such as written text, images, video, and/or audio (p. 111)," has been rediscovered by literacy scholars and facilitated by the development of digital technology. In the context of literacy studies we should ask different pedagogical questions, such as, "What part or parts of a message does each mode, independently or with other modes, convey?", "How are the messages conveyed?", and "How are messages transmitted through multiple modes of communication understood?" (p. 112). In other words, in the digital age and new learning ecology, today's educators should be able to embrace these changes and reconsider what this means in our teaching of language and literacy.

Song and Lee (2014) indicated that informal learning has been greatly facilitated with the advancement of Web 2.0 technology (e.g., blogs, wikis, video sharing sites, web applications, and social networking sites). In comparison to the Web 1.0 platform (e.g., only navigating and reading information), a wide range of Web 2.0 technologies and software applications allows users to actively interact and collaborate with others (DiNucci, 1999; Kitsantas & Dabbagh, 2011). In the learning context, such educational features of Web 2.0 technologies help bridge a

gap between formal learning (e.g., understanding academic contents) and informal learning (e.g., collaborating and creating contents via social media). They also pointed out that 'learner choice' (e.g., selecting their subject matter based on their own particular learning styles) and 'learner control' (e.g., setting their own goals according to their needs and situations) are significantly enhanced by Web 2.0 technologies.

Empirically, several scholars have implemented informal language using a range of Web 2.0 technologies such as social media (e.g., Al-Rahmi, Othman, & Yusuf, 2015; Hrastinski & Aghaee, 2012), tablet PC (e.g., Cayton-Hodges, Feng, & Pan, 2015; Falloon, 2014; Haßler, Major, & Hennessy, 2016; Kim, Park, Yoo, & Kim, 2016), smartphones (e.g., Chan, Walker, & Gleaves, 2015; Han & Shin, 2016; Khaddage, Müller, & Flintoff, 2016), and online games (e.g., Chen, Wang, & Lin, 2015; Iacovides, 2011; Su & Cheng, 2015; Woo, 2014; Zhang, 2015). For example, Ibrahim, Prain, and Collet (2014) investigated how Malaysian university EFL learners used digital devices for informal English learning. A majority of the students positively viewed Web 2.0 devices as potential learning tools to promote social interaction with their friends in a virtual space. The authors suggested that L2 teachers and policy makers should consider incorporating these digital devices into formal instruction for improving students' language skills. Hung (2015) implemented the flipped classroom for Taiwanese EFL learners. It turned out that the students were more content with the WebQuest-based flipped classroom than with the traditional classroom, as the former helped them increase their amount of study hours spent outside the classroom (e.g., previewing/reviewing the materials) and become more active English learners in the classroom (e.g., searching for additional resources and increasing in-class participation). Bogart and Wichadee (2015) examined how Thai EFL students perceived one of the popular social networks, LINE, as an English learning tool. They positively embraced it as a

useful learning tool and were willing to use it for academic purposes. This study also suggested that social networks (e.g., LINE, Facebook, Twitter) could disrupt conventional teaching methods and promote more collaboration between teachers and students beyond the classroom.

However, most of the studies have also emphasized the importance of teacher roles in supporting learners, and some teachers hold different attitudes toward the informal, digital learning.

### 2.1.2 Contrasting Perceptions of Informal Digital Learning

As discussed above, most of the L2 learners have positive attitudes toward informal, digital English learning using a range of Web 2.0 tools. However, teachers tend to hold different attitudes toward the use of technology for informal English learning. According to Çelik and Aytin (2014), Turkish EFL teachers at K-12 level did not take full advantage of digital tools for teaching English although they believed the use of ICTs could enhance students' motivation and proficiency. Most teachers displayed a high level of confidence in using ICTs in EFL instruction, but they cited a lack of administrative support and limited resources (e.g., computers or Internet) for the failure of their actual implementation. Although this study does not explicitly discuss the application of technology for informal English learning, it shows the influence of institutional situation on teachers in relation to digital technologies.

Lai et al. (2016) also showed that teachers in Hong Kong play a minimal role in promoting L2 learners' informal, digital learning outside the classroom. Teachers believed they should have a minimal responsibility in promoting the students' out-of-class autonomous learning with technology because their young students are technology savvy and already have an advanced digital literacy. In contrast, the study showed that students want support from teachers, such as recommending useful online resources and informal, digital language learning strategies.

Thus, L2 teachers still need to play an active role in helping today's Digital Learners become autonomous language learners with technology outside the classroom.

### 2.1.3 New Roles of Higher Education and Faculty

#### Digital Learners' Needs and Characteristics

Several studies have indicated that adolescents aged 13-19 (Erikson, 1959) in the United States are not relating to traditional schooling. According to the Programme for International Student Assessment (PISA) researchers (2000), 25% of American adolescents (15-year-old) feel they do not belong to school and 20% are reluctant to participate in school activities. From 2006 to 2009, Yazzie-Mintz (2009) also conducted a survey on student engagement in schools with more than 275,000 American high school students. They reported that 16% of these high school students were bored in daily school life. Only 36% of the high school students enjoyed every class in school. Prensky (2001) argued that this social phenomenon is a result of the existing education system failing to accommodate today's young students' learning styles and skills. He described this new group of students as *Digital Natives,* who were born roughly between 1980 and 1994 and brought up with a range of digital devices such as computers, digital music, and video games. He likens *Digital Natives* to a "native speaker" in a digital world who is proficient at speaking (or using) Internet language. Influenced by this external technology-rich environment, he argued that adolescents have adopted different learning styles and strategies in comparison to previous generations (Brown, 2000; Frand, 2000; Oblinger & Hawkins, 2005). Thus, he called for fundamental changes in the current education system, advocating building new curricula and pedagogical models that are responsive to the needs of this new generation.

The *Digital Natives* discourse has gained support from several "enthusiast" scholars. They have discussed the characteristics of *Digital Natives* as being team-oriented, multitasking,

tech-savvy, virtually interactive, connected, and geared toward this new visually-oriented generation (Downing, 2006; Gallardo-Echenique, Marqués-Molías, Bullen, & Strijbos, 2015; Martin & Tulgan, 2006; Oblinger & Hawkins, 2005; Rosen, 2007; Tapscott, 2009). These scholars believe that digital technologies can help this new generation become more productive and skillful learners. However, the concept of *Digital Natives* is also open to criticism. The most common criticism is the age boundary between *Digital Natives* and non-*Digital Natives* (or Prensky's term *Digital Immigrants*). This discrepancy may not be applicable to developing countries where young students are less likely to become exposed to a wide range of digital technologies due to a lack of affordances, in comparison to developed countries (Brown & Czerniewicz, 2010). Even in developed countries, this over-generalization based on age may not work because the usage and skills of *Digital Natives* may not be homogenous among peers. Other factors such as regional/institutional context and socioeconomic background also need to be taken into consideration (Kennedy, Judd, Dalgarno, & Waycott, 2010; Margaryan, Littlejohn, & Vojt, 2011). Additionally, these students may not be as skillful and competent as their teachers or *Digital Immigrants* (Bennett, Maton, & Kervin, 2008). Margaryan et al. (2011) also indicate that one's academic discipline can play a role in determining students' digital competence. For instance, engineering majors have more opportunities to use technology in their personal and academic lives (and become "technologically-savvy") than other disciplines (i.e., Social Work majors) or *Digital Immigrants*. Thus, *Digital Natives* discourse is much more complex, and we need more in-depth research (while considering other variables besides age) to reach a comprehensive understanding of this issue (Bullen, Belfer, Morgan, & Qayyum, 2009).

Amidst the "Digital Native" debate, Gallardo-Echenique et al. (2015) has suggested a concept called *Digital Learner*, which can encompass many terms used to describe these new

students in the digital era, such as *Digital Native, Millennials, Digital Generation, Net Generation,* and *Google Generation*, as listed below (p. 172):

- focuses on "learners" rather than "persons", who should realize the possibilities and potentials of digital technologies in their environments and recognize the value of technology and the opportunity it presents the learner in his/her daily life,
- argues that learners are not merely users or consumers of technology,
- highlights the complexities of learner's technology experiences,
- rejects the generational boundary and any chronological generations that exclude other types of actors who share similar practices (accept all learners),
- does not assume any pre-defined learner characteristics, and
- adopts a socio-cultural, anthropological, communicational and pedagogical approach from the learners' perspective.

They also pointed out, "It is more fruitful to discuss what the needs are of digital learners, how staff can respond to those needs and what they need to know to be able to do so, and how technologies can be designed that are responsive to the needs of the digital learners" (p. 173)

**Higher Education in the Digital Age**

In traditional higher education, 'didactic teaching' or 'transmission pedagogy' is the focus. Faculty member tend to disseminate declarative knowledge to students in a classroom, and students memorize this declared knowledge. But its didactic, teacher-centered teaching approach has limitations in today's digital age in that 1) students may lose interest and motivation to learn; 2) they may not understand the content deeply; and 3) they may not successfully transfer the knowledge acquired from a decontextualized classroom to a real, authentic context (Lee & Hung, 2012). Recently, Bridgstock (2016) suggested a new educational model of higher education. In

this model, students would acquire competence through a series of authentic activities outside the classroom (e.g., authentic practice in the community) and either face-to-face or in the online classroom (e.g., learn the concept and engage in discussion). In this learning process, faculty and other educational staff (e.g., librarians) scaffold and support learners to promote their critical thinking and self-regulated learning strategies that are relevant to their current work and prepare them for lifelong learning. Additionally, universities also need to establish a working partnership with industries, other universities, and communities to obtain the latest knowledge and information.

Existing higher education institutions feel a strong need for reinventing their curriculums to meet the learning needs and preferences of today's young learners, for the purpose of enhancing their employability (Bridgstock, 2009, 2016). As more and more students engage in informal learning thanks to a range of new digital tools (e.g., Skype, educational mobile apps, virtual space), universities should build programs with ubiquitous accessibility and rich multimodal environments in which students can learn best in a digital space (Bowen, 2013). At the same time, burgeoning new technologies can not only help overcome the challenges of the US higher education (e.g., soaring costs, dropping enrollments, and waning public funding) but also disrupt the existing higher education system (Bowen, 2013). For instance, Bowen (2013) posited that the rise of online courses such as mass open online courses (MOOCs) could even challenge conventional colleges and universities.

**Blending Formal and Informal Learning for Digital Learners**

As Web 2.0 technologies have facilitated informal learning, it makes us reconsider the relationship between the teacher and student as well as the location of learning settings (Benson, 2011a). As students learn on their own outside school, they can construct their own learning

environment by using technology. Reinders (2014) termed it "Personal Learning Environment (PLE)," one in which students can use their digital tools and resources (e.g., Smartphone, Facebook, Skype, E-portfolio, and YouTube) for a self-directed learning process. The pedagogical benefits of the PLEs, such as fostering autonomy and supporting lifelong learning skills, can be multiplied with the support of teachers. In other words, out-of-class, informal learning should be harmonized with in-class formal learning (Henry & Cliffordson, 2015; Lai, Khaddage, & Knezek, 2013; Reinders, 2014; Zimmerman et al., 2014).

Several attempts have been made to bridge formal and informal learning in this manner. Lai et al. (2013) proposed the Mobile-Blended Collaborative Learning (MBCL) model to connect formal and informal learning. In the MBCL model, the 'seamless' linkage between out-of-class, informal learning (which is portable, flexible, dynamic, and challenging) and in-class, formal learning experiences (which are planned, structured, static and pre-organized) can be achieved through a host of mobile technologies and applications (e.g., Google Apps for collaboration, Twitter for coordination, Skype/Facebook for communication). Similarly, Khaddage et al. (2016) encourage teachers in higher education and other levels of faculty members to blend seamlessly between formal and informal learning through mobile social networking apps which can create portable, flexible and collaborative learning spaces. At the K-12 level, Zimmerman et al. (2014) launched *The Digital Postcard Maker* project to connect student-centered, out-of-school activities with their parents via mobile devices. As part of science education, students submitted their learning activities to their teachers (in school) and parents (at home) and expanded the learning space into both formal and informal settings.

Tour (2015) emphasizes the importance of teachers' "digital mindsets." Although external issues such as institutional barriers (e.g., low budgets), professional issues (e.g.,

inadequate teacher training), and sociopolitical constraints (e.g., standardized testing) may affect teachers' use of technology in the classroom, individual teacher's perceptions and willingness to employ the technology integration play a more critical role. Han, Eom, and Shin (2013) indicated that the integration of ICT-related courses into pre-service teacher education can foster teachers' digital mindsets. Although the authors admitted that the long-term effect of whether the integration of ICT courses into pre-service teacher could be transferred into the 'real' classroom is doubtful in the U.S.—as well as tech-savvy countries such as Singapore (e.g., So & Kim, 2009) and South Korea (e.g., Eom, Shin, & Han, 2011) and Chile (with rich educational ICT resources, e.g., Brun & Hinostronza, 2014), it is important to give L2 learners ample opportunities to observe other teachers' use of technologies in pre-service teacher education.

In TESOL and applied linguistics, Dooly (2009) also showed that the effect of ICT integration in a teacher preparation program operates in the short-term. Although pre-service teachers may take educational technology courses and have some positive attitudes toward use of technologies, they are less likely to implement ICT in an actual teaching setting due to other daunting issues such as classroom and institutional constraints (e.g., too much classroom management and a low-resource school environment). However, Hockly (2014) argued that in any educational context, teachers would face myriad challenges such as student motivation, class size and hours, a potential low-resource institutional environment, and political realities. What is important is whether teachers, regardless of any context, are willing to use digital technologies independently or in collaboration with others (e.g., schools and communities).

Summing up, in order to meet students' needs and implement the ICT into the classroom, higher education should become interested in the integration of ICT by supplying infrastructure and strengthening teacher education programs. Additionally, faculty members should make an

effort to take on new roles in developing innovative pedagogies by linking informal learning experiences with technology (e.g., social media, mobile phones, online games) with formal instruction—autonomously or through collaboration with others.

## 2.2 Informal Digital Learning of English (IDLE)

### 2.2.1 From Formal to Informal English Learning in CALL

In the field of TESOL and Applied Linguistics, a growing number of educators have turned their attention to informal language learning. Benson and Reinders (2011) compiled an edited volume entitled *Beyond the language classroom* from 13 chapters, each of which discusses how language learning takes place in various, informal settings. Although in-class, formal instruction may play a role in receptive skills (e.g., reading and listening), teachers are aware of its limitations in improving productive skills (e.g., speaking and writing). Research on informal English learning is still incipient but has grown in that researchers also know that L2 learners acquire language not merely from formal instruction (in conventional settings) but also from self-directed informal learning as well as interaction (in various non-conventional settings) beyond the walls of the language classroom. They also call for more qualitative studies to understand a more comprehensive view of L2 learners' lives in diverse settings in and outside the classroom.

Similarly, an erudite scholar, Dr. Jack Richards (2015), published a manuscript entitled, "The changing face of language learning: Learning beyond the classroom," in which he offered out-of-class, technology-mediated English learning activities: chat rooms, self-access centers, digital games, listening logs, online resources (e.g., TED Talks), social media, E-mediated tandem learning, video documentaries, television series, and extensive viewing. Here, Richards (2015) called for a shift from classroom-based language learning to an informal learning beyond

the classroom. In particular, with the advent of the Internet and media, L2 learners today have greater opportunities to engage in authentic, meaningful language use outside the classroom. As growing number of language learners today engage in informal learning with an increasing range of opportunities and resources with technology, language teachers should take new roles to help and further facilitate informal language learning outside the classroom. Additionally, the teacher education program should explicitly assert that good teachers are able to prepare their students to use English outside of the classroom.

Chun (2016) has examined how technology has played facilitative roles in Second Language Acquisition (SLA) research over the last four decades: the 1970s-1980s' *Structural CALL* (Technology: Mainframe), the 1980s-1990s' *Communicative CALL* (PCs), the 2000s' *Integrative CALL* (Multimedia and Internet), and the 2010s' *Ecological CALL* (Mobile and wearable devices). In terms of Ecological perspectives of SLA, Kramsch (2008) wrote (pp. 405-406):

> Most institutions are still teaching standard national language according a 19th century modern view of language as a structural system with rules of grammatical and lexical usage, and rules of pragmatics reified to fit the image of a stereotyped Other. The 21st century is all about meaning, relations, creativity, subjectivity, historicity and the trans- as in translingual and transcultural competence. We should conceive of what we do in ways that are more appropriate to the demands of a global, decentered, multilingual and multicultural world, more suited to our uncertain and unpredictable times.

In this perspective, Chun (2016) has suggested *Ecological CALL* as the future area for research on technology-enhanced SLA. That is, SLA will more likely occur outside the classroom as "normalization for CALL" (Bax, 2003, 2011) becomes more prevalent, and technology becomes

an everyday classroom activity tool, taking the place of traditional pens, books and blackboards. For instance, González-Lloret and Ortega (2014) helped provide a glimpse of *Ecological CALL* in their book, *Technology-mediated TBLT*. In this work they show how L2 learners engage in a range of new, authentic tasks with technology, such as negotiating via emails in everyday life. They also urge teachers to prepare L2 learners for functioning effectively in multilingual and multicultural contexts by using various digital technologies.

### 2.2.2 Learner autonomy and CALL

Since the late 1970s there have been, broadly, two schools of thought about learner autonomy. Holec ([1979] 1981) conceptualized the early perspective of learner autonomy as "the ability to take charge of one's own learning" (p. 3), emphasizing the environment or sociocultural context. David Little call it "the individual-cognitive-organizational dimension of learning" approach (Little & Thorne, 2017, p. 12), which highlights an *individual* dimension (a.k.a. independence), such as individual responsibility and learning control (Benson, 2007; Blin, 2004). Another perspective that has evolved over the last few decades is related to the importance of *social* dimension (a.k.a. interdependence) with regard to learner autonomy (e.g., Benson, 2011b; Murray, 2014; Ushioda, 2008) as influenced by sociocultural theory (Lantolf & Thorne, 2006; Vygotsky, 1978). From the social perspective, learner autonomy is highly contextual and is mediated by the social environment, such as teachers, other peers, communities, and other similar social settings.

More recently, with the development of digital and Web 2.0 technologies, L2 affordance and opportunities have expanded beyond the classroom into informal language learning, where learner autonomy becomes even more important (Cappellini et al., 2017; Chik, 2014; Richards, 2015). Leo van Lier (2004) defines an affordance as "a relationship between an organism [a

learner, in my study] and the environment, that signals an opportunity for or inhibition of action" (p. 91). Some empirical studies (e.g., Palfreyman, 2011; Dressman et al., 2016) have illustrated how EFL learners have capitalized on a range of digital technologies (e.g., smartphone, the Internet) and social environments (e.g., social media, digital games, online communities) to create English learning opportunities and turn constraints of their learning environment (e.g., conservative society, rural area) into affordances. Other studies have also found that young EFL students play L2 digital games with "entirely out-of-school non-institutional realms of freely chosen digital engagement" (Thorne, Black and Sykes, 2009, p. 802; also see Jensen, 2017; Sundqvist, & Sylvén, 2014; Sundqvist & Wikström, 2015).

### 2.2.3 Conceptualization of IDLE

Given the growing interest in understanding learner autonomy within out-of-class CALL settings, how can we conceptualize a wide range of informal English learning activities that mostly take place outside the language classroom? Benson (2011a) proposed four dimensions of out-of-class L2 learning in terms of *formality* (whether language learning experience is formally structured and certificate is granted: e.g., formal, non-formal or informal), *location* (where language learning occurs physically: e.g., in-class, out-of-class, extracurricular, and extramural), *pedagogy* (to what degree formal language learning processes are involved: e.g., instructed, self-instructed and naturalistic), and *locus of control* (to what extent language learners take control of their own learning; e.g.: self-directed or other-directed). Although Benson himself has admitted that this is "a somewhat rudimentary framework" (p. 15), this framework nevertheless helps us conceptualize English learning in the context of diverse informal digital learning of English (IDLE) (e.g., Chik, 2014).

**Table 1. Classification of informal digital learning of English (IDLE)**

| | Formal digital learning of English | Non-formal digital learning of English | IDLE | |
|---|---|---|---|---|
| | | | Extracurricular | Extramural |
| Formality | Structured; Certification | Structured; No Certification | Semi-structured; Certification | Unstructured; No Certification |
| Location | In-class | Out-of-class | Out-of-class | Out-of-class |
| Pedagogy | Instructed | Instructed | Self-instructed | Naturalistic |
| Locus of control | Other-directed | Other-directed | Self-directed | Self-directed |

As summarized in Table 1, we can conceptualize IDLE, based on Benson's (2011a) four dimensions. In this study, 'digital' refers to both digital devices (e.g., smartphones, tablet PC, laptop, desktop computers) and resources (e.g., MP3, Web apps, social media, YouTube). Additionally, 'certification' refers to a document that verifies a person's competence or official qualification that is granted by an accredited or authorized individual or agency. More importantly, other agencies or employers should also recognize this certification. For example, undergraduate students receive a 'certification' granted by a government-accredited agency (e.g., University of Illinois at Urbana-Champaign) for the completion of their educational program. Moreover, such a certification is also recognized by (and accepted into) other educational institutions (e.g., Harvard University). Therefore, a 'certification' that is issued by *Coursera* but not recognized by another formal agency is not valid in this study.

Specifically, *Formal digital learning of English* refers to structured, digital learning of English instructed by teachers that takes place inside the classroom in a formal educational program that grants a certification. For example, students take online grammar quizzes in the classroom that are structured and instructed by a teacher. Based on their performance on various activities, students receive a grade, which is necessary for earning certification. *Non-formal*

*digital learning of English* refers to structured, digital learning of English that is instructed by teachers and takes place outside of a formal language classroom and lacks formal certification. For example, students take online English grammar lessons outside of a formal language program in order to compensate for in-school language lessons or to prepare for more advanced English learning. Instructors (e.g., private tutors) provide structured and instructed video lessons. As mentioned above, this online course may offer students course materials, graded materials, final grades and course certification, but it may not be valid. *IDLE in extracurricular contexts* is self-directed, self-instructed, digital learning of English in semi-structured, out-of-class environments that are still linked with a formal language program. For example, students take primarily responsibility for completing homework or group projects through self-instruction (e.g., referring to Wikipedia articles or watching YouTube tutorials to get their homework done) outside of the classroom, but it is still partially structured by teachers (i.e., semi-structured), who assess students' performance. Finally, *IDLE in extramural contexts* is self-directed, naturalistic, digital learning of English in unstructured, out-of-class environments, independent of a formal language program. For example, students, on their own initiative, chat casually with other English users on Facebook for socializing. However, if that chatting is part of school assignments in out-of-class CALL environments, it is considered *IDLE in extracurricular contexts* because the activity is structured and evaluated by the teacher. This study adopts *IDLE in extramural contexts* as a guiding principle for exploring the research questions.

## 2.3 IDLE in EFL Contexts

### 2.3.1 The Roles of Multimodality in EFL Contexts

Some studies have theorized how digital technology has created a multimodal language-learning environment (see Dressman, 2016a) and how the use of such media can be beneficial to

EFL learners (see Dressman et al., 2016). Guided by Charles Sanders Peirce's theory (1955), Dressman (2016a) accounted for how human beings make sense of every form of sensory input (e.g., vision, smell, sound) in three ways. The first type of sensory input is through its *resemblance* to other things human beings have already experienced. For example, if we see a chair, we immediately recognize it as a "chair" because of its resemblance to other objects called "chairs" that we have seen before. Peirce calls signs (or things that we recognize because they resemble other things we have experienced before) "icons". The second kind of sign we recognize is through its *contiguity* to (or placement near) another object in time or space. For example, if we hear a siren sound, we immediately recognize it as a siren because of its association with the presence of the "police car" we see in the same space. Peirce calls signs (or things that make sense through their association in time and space with other signs) "indexes." Finally, the third way is through *symbolism,* a sign that is associated with a particular meaning by social convention. For example, if we see "5" or we hear "five," it represents the concept of "five-ness" to us. Peirce calls signs like these "symbols." According to Dressman (2016a), Peirce argues that all signs are understood through relations that are either iconic (because they resemble something else we have seen before), indexical (two things are associated with one another), or symbolic (because they have symbolic or conventional connection to it).

Peirce has also pointed out that these different sign relations convey meaning at varying levels of comprehension. At the first level, icons convey "Firstness." That is, our recognition of something as a resemblance of something else is a basic and powerful way to recognize something. At the second level, indices convey "Secondness" as an informational, relational sense of presence. At the third level, symbols convey "Thirdness": here, ideas are fully articulated and understood through the use of other symbols. In other words, different types of

signs convey different types of meanings: emotional, intuitive, directive, rational and argument-based. That is why multimodal messages often have so much power at many different levels and expand our full understanding of something intellectually and emotionally. In light of this, Dressman et al. (2016) has argued that successful Moroccan EFL students are users of technology to incorporate sound, visual, and video aspects (or what Peirce would call "Firstness" with "Thirdness"), which provide more complete and authentic comprehension of a topic. Therefore, language educators should redesign their language education approaches by considering the following implications (Dressman et al., 2016, pp. 69-70):

- Language use is grounded in a web of prior experiences that are foundational to the meaningfulness of language
- The power of these prior experiences is that they produce meaning in different ways, through differing processes of association and at different levels of cognition and emotion
- It is these deep, nonlinguistic, and very purposeful levels of semiosis that motivate that use of language

**Table 2. Studies of Integration of Multimodality in EFL contexts**

| Category | Topic | Author(s) |
|---|---|---|
| Broadcast media | Broadcast Media & TV in Morocco | Dressman et al., 2016 |
| | Captioned video for L2 listening and vocabulary Learning | Perez et al., 2013 |
| Blogs | Voice blogging and L2 speaking in Taiwan | Hsu, 2016 |
| | Collaborative writing in academic Web-based projects | Kessler et al., 2012 |
| | Weblogs | Trajtemberg & Yiakoumetti, 2011 |
| | Organizing blogs | Warhol & Fields, 2012 |
| CMC | Facebook learning | Alm, 2015 |
| | Digital identity formation of Korean EFL learners | Lee & Kim, 2014 |
| | Language learning via SNS | Lin et al., 2016 |
| | SNS for L2 instruction | Prichard, 2013 |
| | Desktop videoconferencing | Satar, 2013 |

| | | |
|---|---|---|
| | SNS *Bussu* | Valencia, 2016 |
| Mobile devices | Mobile technologies | Bachore, 2015 |
| | Tablet PC | Chen, 2013 |
| | MALL in L1/L2 pedagogy | Chwo et al., 2016 |
| | Mobile for language learning | Godwin-Jones, 2011 |
| | Special educational needs and technology | Hockly, 2016 |
| | Adaptive video caption using handheld devices | Hsu, 2015 |
| | Mobile learning | Kukulska-Hulme, 2009 |
| | Digital identity formation of Korean EFL learners | Lee & Kim, 2014 |
| | Mobile learning | Stockwell, 2008 |
| | Mobile learning in Japan | Thornton & Houser, 2005 |
| Online Game | Digital game and English learning in Japan | Bolliger et al., 2015 |
| | Young learners' L2 learning | Butler et al., 2014 |
| | Digital game-based learning | Chiu et al., 2012 |
| | Game in language learning | Godwin-Jones, 2014 |
| | EE & Vocabulary | Olsson & Sylvén, 2015 |
| | Digital game-based learning & WTC | Reinders & Wattana, 2015 |
| | Young EFL students with English in Mexico | Sayer & Ban, 2014 |
| | Young L2 English learners in Sweden | Sundqvist & Sylvén, 2014 |
| | Digital game and L2 English vocabulary | Sundqvist & Wikström, 2015 |
| | Gaming and L2 proficiency | Sylvén & Sundqvist, 2012 |
| | Digital board games in EFL classrooms | Wu et al., 2014 |
| Autonomous, digital learning | Out-of-class language learning in Brazil | Cole & Vanderplank, 2016 |
| | Self-regulated out-of-class language learning | Lai & Gu, 2011 |
| | Students' use of technology for learning | Lai et al., 2012 |
| | Framework for self-directed language learning w Technology | Lai, 2013 |
| | Understanding the quality of out-of-class English Learning | Lai et al., 2015 |
| | Enhancing self-directed language learning with te | Lai et al., 2016 |
| | Podcasts and self-regulation ability in Iran | Naseri et al., 2016 |
| | 20 years of autonomy and technology | Reinders & White, 2016 |

As summarized in Table 2, a number of recent studies have also discussed the pedagogical merits of multimodality in EFL contexts in relation to broadcast media, blogs,

Computer Mediated Communication (CMC), mobile devices, online game, and autonomous, digital learning. For example, Berglund (2009) used a desktop videoconferencing platform called FlashMeeting to implement a student-centered discussion task. FlashMeeting contains multimodal components such as voice, broadcasting, text interaction, thumbnail video, and emoticons. This videoconferencing allowed passive students to become more active (or talkative). However, Berglund argued that multimodality itself does not make students interactive, but the roles of the instructors are critical in choosing the right tool, designing an appropriate task (considering students' level of language proficiency and backgrounds), and moderating the online forum (e.g., balancing participation from both active and passive students). Huang (2015) used multimodality to teach a critical perspective in a Taiwanese freshman English course. First, students watched three movies (containing multiple semiotic resources such as images, sounds, gestures) to identify stereotypes or discriminatory scenes represented, in terms of race, class, and gender. Later, students composed a multimodal report and presented the results of their critical analysis of the film. Through this activity, students were able to shed light on "what is not said explicitly" in the film (e.g., the power relations between characters) and present their findings from a critical perspective using diverse semiotic resources.

Additionally, watching movies with subtitles or an adaptive video caption can provide multi-dimensional input (e.g., context and non-verbal input) and improve EFL students' motivation and vocabulary, listening, and reading skills (Danan, 1992, 2004, 2010; Hsu, 2015; Markham, Peter, & McCarthy, 2001). Lee and Kim (2016) have also identified the positive effect of the Social Network Service (SNS) as a learning tool on EFL university students' English grammar inside and outside the classroom. In particular, they showed that this multimodal-learning environment works better for less proficient L2 university students' (LPSs') writing, as it

allows them to reduce their anxiety and write more. Alm (2015) pointed out that L2 learners in New Zealand capitalized on a social networking site such as Facebook for informal language learning. L2 learners became exposed to a range of L2 content through various types of multimodal input (e.g., texts, images, videos). In particular, advanced L2 proficiency-level learners tended to have native speaker Facebook friends for authentic communicative purposes. Role-playing games (MMORPGs) might also help improve L2 vocabulary (Ranalli, 2008; DeHaan, Reed, & Kuwada, 2010; Sylvén & Sundqvist, 2012). Peterson (2012) has suggested how such games can enhance students' conversational language skills. Additionally, Godwin-Jones (2011) pointed out how smartphones could be used for informal language learning at an individual level. Their learning effects can be maximized if language instructors help L2 learners use them both inside and outside the classroom. Song and Fox (2008) discussed how EFL learners took a proactive role learning and acquiring English vocabularies by using a variety of tools.

More recently, Hsu (2015) examined whether adaptive captions could improve the listening comprehension of EFL 11$^{th}$ graders. This video-based language learning became more facilitative due to the convenience of handheld devices. It shows that additional multimodal information (e.g., translations of difficult words) served as a scaffold in particular for low-level L2 learners for listening comprehension. Guided by Output-driven/Input-enabled theory, Hsieh, Wu, and Marek (2016) used the LINE smartphone app for implementing a flipped classroom to improve EFL learning, which helped improve students' motivation about and acquisition of English idioms. Jiang and Luk (2016) accounted for five factors to improve Chinese EFL students' motivation toward multimodal activities –that is, curiosity, control, competition, cooperation, fantasy, and recognition. Combining these motivational components, English

teachers may create a more motivational learning environment by using Hsu's (2015) caption-embedded mobile devices. Abrams (2016) taught a first-year German language course using TV programs. The beginning L2 learners had a positive attitude toward the multimodal authentic resources in a language course. However, it was also found that students engaged in TV programs differently depending on their level of L2 proficiency and preferences toward a particular TV program. Therefore, L2 teachers should choose multimodal materials that match learners' needs and preferences. If they are beginner L2 learners, as in case of Hsu's (2015) study, enough scaffolding such as L2 subtitles helps them engage with resources. As previously mentioned, studies have demonstrated that multimodality has been increasingly become an integrated part of school curriculum and instruction. In this regard, Van Leeuwen (2015) suggested that teacher education should include multimodality literacy. Also, it is time to develop a validated assessment tool for different levels of multimodality literacy for teaching and learning.

### 2.3.2 Empirical Studies of IDLE in EFL Contexts

An increasing number of studies have documented that successful foreign language learners amass language-learning experience in formal and informal settings, each of which displays unique advantages that complement one another (Bäumer, Preis, Roßbach, Stecher, & Klieme, 2011; Colley et al., 2003; Hall, 2009). In particular, EFL learners today have increasing opportunities to overcome several limitations of learning the language (e.g., large class size, an exam-driven curriculum and instruction, English teachers' low English proficiency) as they take advantage of a range of new digital technologies that contain multimodal components. Therefore, as I have discussed above, an increasing number of TESOL and CALL researchers and practitioners have become interested in 'informal digital learning of English (IDLE)' in various

EFL contexts – e.g., Denmark (Jensen, 2017), Sweden (Sundqvist, 2009; Sundqvist & Sylvén, 2014; Sundqvist & Wikström, 2015), France (Sockett, 2013, 2014; Sockett & Toffoli, 2012), Morocco (Dressman, et al., 2016), Russia (Kozar & Sweller, 2014), Malaysia (Tan, Ng, & Saw, 2010), India (Mitra, Tooley, Inamdar, & Dixon, 2003), China (Chen, 2013; Lai et al., 2015; Sun, Franklin, & Gao, 2017), South Korea (Lee, 2017), Japan (Butler, Someya, & Fukuhara, 2014; Casanave, 2012), and Brazil (Cole & Vanderplank, 2016).

For example, Lai's (2015) study has indicated that foreign language learners in a Hong Kong context perceived that their language learning experience inside and outside the language classroom was qualitatively different. L2 learners viewed 'in-class learning' as learning the basics of English and helping them focus on and persevere in learning English. In terms of 'out-of-class learning', their perceptions included increasing interest and motivation in learning, acquiring a practical usage of English, boosting meta-cognitive learning strategies (e.g., planning and monitoring learning progress), and connecting with other L2 learners and a foreign culture.

That is also true for foreign language learners in other EFL contexts, such as in Morocco. They viewed informal, out-of-class language learning as more effective than formal, in-class education (Dressman et al., 2016). More specifically, more than 50% of their knowledge and skill in speaking English was a result of informal, autonomous, media-based activities. In particular, the top proficient group (which was fluent in speaking and listening) responded that 70-85% of their English had been learned and acquired outside the classroom by creating an "invisible university" of English learning materials for themselves. Despite only three or four years of instruction in a public school system that is generally lacking in resources, young Moroccan students took advantage of an informal, out-of-class, authentic environment with technology (e.g., watching movies and video, talking with foreign friends), so that they became

more motivated and engaged in language learning (Dressman, 2016b; Ennaji, 2005). Dressman (2016b) acknowledged that Moroccan EFL students successfully capitalized on unique strengths of formal learning (e.g., vocabulary and grammar) and informal learning (e.g., use).

More recently, empirical studies have demonstrated that there is a strong association between IDLE and its learning outcomes. For instance, there is a positive correlation between IDLE and its cognitive English learning outcomes, such as oral proficiency; vocabulary size and knowledge; and listening, reading comprehension skills; and test grades (Lai et al., 2015; Larsson, 2012; Sundqvist, 2009; Sundqvist & Wikstrōm, 2015; Sylvén & Sundqvist, 2012). Other studies have shown that IDLE contributes to greater self-efficacy and confidence (Lai et al., 2015; Palviainen, 2012; Sundqvist, 2011).

Pedagogically, Lai (2016) has argued that three components (i.e., use, quality, and support) are necessary to help students engage in IDLE activities beyond the classroom. As for "use" of language learning, Lai (2013) indicated that foreign language learners in Hong Kong had consistently reported spending an average of 1-3 hours per week engaging in self-initiated, self-directed use of technology for language learning. But in terms of the nature of technology use, Lai reported that the highest frequency of use was with technology for independent learning (that helped students memorize vocabulary and grammar for individual learning, etc.). However, they also reported that the least frequent use of technology for language learning centered on lack of social connections (talking directly with native speakers or other learners of the target language). In other words, students' most frequently engage in independent learning to obtain more information about language, followed by language use to expand such opportunities, and, much less frequently, social connections in order to seek engaging learning experiences and maintain their own motivation. This particular study showed that wide variations exist in

frequency, type, and nature of technology use for language learning among foreign language learners.

As regards the "quality" of language learning, Lai et al. (2015) used the metaphor of ecology, by which bio diversity is the key to the health of ecology. The authors looked at whether diversity, in terms of language learning activities, could also serve as a key for the quality of students' out-of-class learning experiences. The researchers found that the diversity of a meaning-focused activity that students engaged in in the language classroom was a consistent predictor for their grades, levels of confidence, and enjoyment of learning. The authors also found that students' use of technology (to support a wider range of language learning purposes) served as a significant predictor of their levels of confidence and enjoyment of learning. Therefore, diversity or a variety of language learning activities outside the classroom may be the key indicator regarding the quality of a language learning experience.

Regarding the "support" of language learning, Lai (2015) investigated how teachers affected students' use of technologies outside the language classroom. Specifically, she examined whether teachers' instructional behaviors inside the language classroom could influence students' use of technology outside the classroom. She focused on three types of teachers' instructional behaviors. One was affective support with respect to the encouragement teachers provided the students—that is, encouraging them to use technology outside the language classroom. The author found that affective support influenced the students' use of technology by enhancing their perception of the usefulness of said technology. She also looked at capacity support through recommendations. For example, teachers provided (or recommended) students with resources, tips, and meta-cognitive tips for using technology and how to effectively select technology outside the language classroom. She also viewed behavior support with which

teachers engaged students by using technology-enhanced activities inside the classroom or assigning them to employ technology-enhanced or -mediated activities assignments outside of class. Capacity support and behavior support influenced students' use of technology through enhancing facilitation, which in turn boosted their confidence regarding the use of technology. She concluded that teachers' instructional behaviors play a significant role in influencing students' use of technology outside the classroom. Since teachers' influence reflects multi-dimensional concepts, different types of instructional behaviors need to be used simultaneously to enhance students' use of technology beyond the classroom. Lai (2013) also pointed out that there are other factors that could influence the students' use of technology beyond the classroom. Some are related to learners' interpretation of learning requirements; others are related to their own evaluation of their learning capacity and degree of motivation.

### 2.3.3 English Learning Outcomes and IDLE: Quantity vs. quality

Although research on IDLE is still in the early stages, current studies find pros and cons regarding IDLE for L2 learning. Burston (2014, 2015) and Sung, Chang, and Yang (2015), for example, have suggested that mobile informal learning may not produce substantially better effects than formal learning. In particular, meta-analysis studies (Sung et al., 2015; Sung, Yang, & Liu, 2016) have provided evidence that mobile learning lasting less than one week usually did not produce a significant effect. On the other hand, other studies have reported a positive correlation between L2 learning outcomes and IDLE quantity and quality.

During the past decade, CALL research has provided evidence regarding the relationship between L2 vocabulary learning and extramural language learning through mobile devices (Stockwell, 2010), Short Message Service (Cavus & Ibrahim, 2009; Hayati, Jalilifar, & Mashhadi, 2013; Lu, 2008), and social media (Sockett &Toffoli, 2012). In particular, IDLE

research on digital game-play and L2 vocabulary acquisition has been rapidly increasing in European countries. For example, Olsson (2011) found that Swedish teenagers, who engaged most frequently in out-of-school extramural English (EE) activities (mainly digital games), obtained the highest scores for their English writing tasks and used longer and richer English vocabularies. This result has been consistent with the other studies (Sundqvist, 2009; Sylvén & Sundqvist, 2012), which reported that frequent EE activities (mainly digital game-play) significantly correlated with greater L2 English vocabulary size. Sundqvist and Sylvén (2014) also showed that frequent digital gamers in EE contexts scored significantly higher on L2 English vocabulary tests than moderate and non-digital gamers. They also found that frequent gamers used more advanced English vocabulary in writing an essay. More recently, Sundqvist (2016) found that multiplayer game players[2] achieved higher scores on both productive and receptive vocabulary tests than did single game players (e.g., "The Sims" and "Grand Theft Auto") or non-gamers. This result indicated that the young Swedish L2 learners acquired many English words during their game-play, as they had to understand game content in English and engage in complex multiplayer online games through interaction with other English users. Additionally, several studies have reported a positive relationship between *quantity (frequency)* of IDLE activities and L2 learning outcomes such as vocabulary knowledge, reading and listening, and school grades (Jensen, 2017; Olsson, 2011; Sundqvist, 2009; Sundqvist & Sylvén, 2014; Sundqvist & Wikström, 2015; Sylvén & Sundqvist, 2012). These studies have consistently suggested that frequent engagement with IDLE activities (e.g., digital games) is positively correlated with L2 learning outcomes among young EFL learners in Nordic regions. These findings indicate that EFL learners can develop and acquire English knowledge through massive

[2]They played massively multiplayer game (e.g., *World of Warcraft*, *RuneScape*, and *Warhamme*r online) and multiplayer games (e.g., *Call of Duty* and the *Battlefield* series).

exposure to English as well as active interaction with other English users in various IDLE contexts.

However, Olsson and Sylvén (2015) showed some mixed results: a) there was a significant correlation between EE and vocabulary outcomes among first-year students in Sweden's upper secondary school system, but, b) there was no such correlation among second- or third-year students. These results may hint that the quantity of IDLE (e.g., spending much time watching movies or playing digital games in EE contexts) may not have the same effect on L2 learners' vocabulary gains, depending on their learning context and proficiency levels. Some other recent studies (Lai et al., 2015; Lee, 2017) have emphasized the importance of *quality (diversity)* of IDLE activities, which can enhance English learning outcomes such as anxiety, confidence, productive vocabulary knowledge, speaking, and formal testing.

Summing up, aforementioned studies have generally indicated that the quantity of IDLE can exert a significant influence on L2 learners' some English knowledge. However, the relationship between IDLE and overall L2 English learning outcomes has yet to be fully clarified by empirical research with other L2 learners in various EFL contexts (e.g., Korean EFL learners). Further, our knowledge of IDLE and L2 learning has focused exclusively on digital game-play, overlooking other types of IDLE activities (e.g., using social media and watching YouTube videos) and quality of IDLE activities.

### 2.3.4 Willingness To Communicate (WTC) and IDLE

For more than 30 years the topic of willingness to communicate (WTC) has garnered research attention. McCroskey and Baer (1985) proposed the first WTC model to account for how individual attributes (e.g., stable personality) affect one's first language (L1) communication. The link between WTC and L2 education was initially established in the 1990s.

Since then, L2 WTC has been theorized from *trait-like* and *situation-specific* perspectives. The proponents of the *trait-like WTC*, who focus primarily on individual characteristics to explain WTC in L2 communication, have identified various personal attributes affecting L2 learners' WTC, such as motivation and attitude (Hashimoto, 2002; MacIntyre, Baker, Clément, & Donovan, 2003; Ryan, 2009), self-confidence (Baker & MacIntyre, 2003; Clément, Baker, & MacIntyre, 2003; Yashima, 2002), international posture (Yashima, 2002, 2009; Yashima, Zenuk-Nishide, & Shimizu, 2004), personality (Ghonsooly, Khajavy, & Asadpour, 2012; MacIntyre & Charos, 1996), and gender and age (Macintyre, Baker, Clement, & Donovan, 2002).

The scope of WTC has been extended to encompass contextual (or *situation-specific*) variables relating to WTC in L2 communication (MacIntyre, Clément, Dörnyei, & Noels, 1998). WTC in this sense often refers to "a readiness to enter into the discourse at a particular time with a specific person or persons, using a L2" (ibid, p. 547). The *situation-specific WTC*-oriented researchers have identified contextual factors such as classroom environment (Peng & Woodrow, 2010), immersion experience (MacIntyre et al., 2003) and interlocutors (Cao & Philp, 2006), all of which may mediate L2 learners' WTC. More recently, some researchers have adopted an *ecological* perspective – combining both individual (i.e., trait-like) and contextual variables (i.e., situation-specific) as a situational and dynamic (not static and linear) process for L2 WTC – that contribute to further advancing our understanding of this topic (e.g., Cao, 2011; MacIntryre & Legatto, 2011; MacIntyre, Burns, & Jessome, 2011; Pawlak & Mystkowska-Wierelak, 2015).

In the past few years, interest in WTC among East Asian language learners has proliferated (Shao & Gao, 2016). For example, the recent 'virtual special issue on reticence and WTC' of the *SYSTEM Journal*, one of the high impacted journals in the field of TESOL and Applied Linguistics that is also indexed in Social Science Citation Index (SSCI), that indicated

that 63 articles on WTC-related topics were published in *SYSTEM* in 2011-2015, of which around 60% were published in the previous two years (ibid). However, the authors' review of the research trends suggested that, when examining East Asian L2 learners' WTC in the classroom, some studies still limited themselves to biased, simplistic cultural variables (e.g., East Asian L2 learners tended to be "passive" and "reticent" in class due to the influence of the Confucian culture) and disregarded other individual or contextual factors, thereby impeding us from sufficiently depicting and understanding the L2 WTC issue. They noted that an *ecological* perspective would render a valuable theoretical lens to elucidate several variables – prior cultural background (Chen, 2003; Jackson, 2003), fear of losing face in public (Hsu, 2015; Zhong, 2013), study abroad experiences (Kang, 2014), low proficiency level (Jackson, 2003), anxiety (Peng, 2012), and ideological beliefs (Subtirelu, 2014) – that may come into play with regard to L2 WTC among East Asian students (for more details, see the virtual issue of *SYSTEM* on reticence and WTC of East Asian language learners).

With changing ecological conditions of L2 learning and teaching, some researchers have also undertaken research on relations between L2 WTC and L2 interaction in online environments such as chatting (Compoton, 2004; Freiermuth & Jarrell, 2006; Jarrell & Freiermuth, 2005), digital games (Reinders & Wattana, 2014, 2015), and online course (Kissau, McCullough, & Pyke, 2010). Nonetheless, less effort has been extended toward examining other critical contexts of online interaction, particularly the informal digital learning of English (IDLE) context, a rapidly emerging L2 communication CALL framework.

### 2.3.5 IDLE in a Korean Context

#### English Education in South Korea

It is important to expand the frames of reference for scholarly questions, especially around the larger historical-cultural-political-economic-educational factors that also shape the nature of engagement with the English language and account for English outcomes in South Korea. Therefore, this section documents those five major factors (i.e., historical, cultural, economic, political, and educational factors) that may have helped the spread of English in Korea in addition to students' attitude and outcome in English, which also would help us explore Korean university EFL learners' IDLE activities in relation to their English learning outcomes and WTC.

***Historical Factors***

South Korea (which is slightly bigger than Indiana) is located at Eastern Asia, bordering the East Sea (Japan) and the Yellow Sea (China). As an ethnically homogenous nation, Korea first began English education in 1883 (Choi, 2006; Kim, 2009). During the Joseon Dynasty period (1883-1910), King Gojong established the first modern English school, *Dongmunhak*, to train interpreters. Missionary schools were also established, but English education was offered mostly for noblemen and government officers. During the Japanese Colonial Period (1910-1945), Japanese instructors replaced native English speaking teachers, weakening the status of the English language. After independence in 1945, the U.S. military settled in South Korea, making English the primary foreign language (Lee & Lee, 2010). In the 1950s and 1960s, Koreans with good English ability occupied a high social standing, so many elites wanted to study at an American university (Lee & Lee, 2010). English language education was also emphasized in order to develop Korea (by reading English language textbooks and adopting American philosophy) and eliminating vestiges of Japanese colonialism. English also became a mandatory subject on the college entrance exam (Choi, 2006).

It is the 1980s and 1990s when Korea's English boom began (Lee & Lee, 2010; Park, 2009a). After the Cold War ended in the mid-1980s, South Korea hosted the 1986 Asian Games and the 1988 Seoul Olympic Games, increasing awareness of globalization. In 1994, the Korean government placed a great emphasis on the English language in an effort to globalize Korea. After being struck by the Asian financial crisis in 1997, Koreans greatly recognized the value of English, prompting Korea's "English fever" (e.g., $15.6 billion annual English tutoring) (Chun & Choi, 2006). But most stakeholders such as policymakers, textbook publishers, English teachers, and students tended to view globalization as Americanization, favoring American English and culture (Ahn, 2014, 2015; Cho & Palmer, 2013).

***Cultural Factors***

Korea is a linguistically and ethnically homogenous society where people tend to use one language (i.e., Korean) and behave collectively. Despite several invasions by neighboring countries for centuries, outsiders' attacks have actually strengthened Koreans' national solidarity and patriotism, maintaining the unique 'one-race' Korean identity (Kang, 2015). Throughout its recent history, including the Korean War, this national identity has engendered Korea's distinctive value system, including such notions as seniority, hierarchism, and collectivism—all of which have worked to reinforce the "deep-rooted sense of ethnic national identity and unity shared by Koreans" (Park, 2009b; Shin, 2006).

Since the 1990s Korea has experienced rapid demographic changes. There has been an influx of migration into Korea (e.g., more than 500,000 foreign workers, with 150,000 international marriages constituting nearly 10% of all marriages in Korea) (Lim, 2011; Korea Immigration Service, 2014; Statistics Korea, 2014). The population of foreign residents in Korea had constantly risen, from 1,066,273 in 2007 to 1,576,000 in 2013 (Korea Immigration Service,

2014). In 2006, policymakers started using words such as *multiculturalism* and *multicultural family*, which became popular technical terms (Tanghe, 2016). However, Korea also has confronted issues of racial preference and discrimination. That is, Koreans tend to discriminate against minority group members (e.g., non-Western immigrants) while accepting Westerns (e.g., American or native English speakers) into Korean society with open arms (Schroeder, 2011; Tanghe, 2016).

***Economic Factors***

After the Korean War, Korea was in a desperate situation. In the 1960s, Korea's Gross Domestic Product (GDP) per capita was similar to levels of some African countries, including Somalia. By 2015, however, Korea reached fourteenth in the world economy with a GDP of $1,849 trillion, showing remarkable economic growth during the past five decades (The World Factbook, 2016). Since Korea has no natural resources and must rely heavily on exports (comprising of nearly half of its GDP), it has placed much emphasis on education to achieve economic prosperity (Lee & Lee, 2010). As a result, Korea has also achieved remarkable educational achievements, such as the world's highest literacy rate (100%) in 2015 as well as being the top performance in Trends in International Mathematics and Science Study (TIMSS) and Programme for International Student Assessment (PISA) since 1995 (Mullis, Martin, Foy, & Arora, 2012; OECD, 2014).

As for English education, total private education expenditures for K-12 students in Korea exceeded 17.8 trillion (nearly US $18 billion) in 2015, which spent 244,000 won (US $197) every month (Statistics Korea, 2016; Yunhap News Agency, 2016). Almost a third of the private education costs is spent on English-related education such as cram schools (*hagwon*), private tutoring, standardized English tests, English camps, and study abroad programs, which marks the

highest portion among other subjects in Korea and is nearly three times higher than English education costs in Japan (Chun & Choi, 2006; Kwaak, 2014; Park, 2009a). As a result, *hagwon* grew rapidly by more than 20% annually from 2005 to 2009, and more than 17,000 English *hagwon* exist in Korea (Kim, 2013). Since the 1990s, this English boom fueled early study-abroad, which created a unique Korean term *Gireogi gajok* (wild goose family), which refers to "the newly-emerged spilt-household transnational family where the mother and pre-college-aged children migrate to a foreign country for the children's education while the father remains behind to endure the financial security of the family" (Shin, 2010, p. 8). As more and more family members live separately for the early study-abroad each year, the *Gireogi gajo* phenomenon has become a social concern (Choi, 2005).

Why do Koreans show such frantic zeal for English education? Hu and McKay (2012) and Park (2009a) have pointed out that globalization has transformed the landscape of a global economy, which has led Koreans and the Korean government to recognize the English language as an indispensible asset. It has been reported that there is a positive relationship between a country's English ability and its economic power, exports, foreign business, and level of technological innovation (Brock, 2015; Tran, 2015). Thus, investment in the English language may serve as a major force in shaping Korea's economic and educational development. Koreans have continued to spend enormous amounts of money on English education—more so than any other country (e.g., compulsory English instruction from primary school through university, the world's largest number of TOEFL examinees annually with available data [Educational Testing Service, 2004, 2005], see Table 3). Nearly 75% of office workers also responded that English was a very important foreign language, and more than 85% of them feel stressful about English at work (The Korea Herald, 2016). It is ironic that despite such zeal and investment, Korea's

English proficiency level has still managed to maintain the status quo (Chun & Choi, 2006; Kochen, 2014).

**Table 3. Number of TOEFL CBT examinees between July 2003 and June 2005**

| Country | Number of Examinees (July 2003 - June 2004) | Number of Examinees (July 2004 - June 2005) |
|---|---|---|
| South Korea | 85,010 | 102,304 |
| India | 41,836 | 42,238 |
| China | 21,206 | 17,963 |
| Morocco | 405 | 385 |

*Note: Total number of examines in 2004 ($N$ = 521,082) and in 2005 ($N$ = 554,942)

***Political Factors***

Since the 1990s the Korean government has played a decisive role in stirring up English fever by implementing several innovative policies such as renovating the College Scholastic Ability Test (CSAT), introducing English into primary schools, instituting an English-only policy, and importing native English-speaking teachers (Chang, 2009; Kang, 2012; Park, 2009a). In January 1991, the Korean government announced that English listening tests would be included in the CSAT in order to strengthen students' communicative competence. The number of listening questions on the English test in the CSAT has gradually increased from 10 out of 50 questions in 1994 (accounting for 20 % of the English test) to 22 out of 45 in 2014 (49%). As a result, the national curriculum has also been transformed in order to foster students' communicative competence in the classroom (National Curriculum Information Center, 2016). English textbooks (which were published for the 6th national curriculum in the early 2000s) also included listening materials for each unit (Lee & Lee, 2010). Therefore, it prompted Korean parents preparing their children for the English listening tests, which brought about a number of new CSAT-related books (Park, 2009a).

Another new governmental policy was to introduce English as a required subject from 3rd grade onward in primary schools in 1997 (Kang, 2012). This policy has caused heated discussions across Korea as it can bloat the private education market, including *hagwon* or English camps in the wider society. Similarly, the English-only policy introduced in 2001 has spurred a controversy (Kang, 2012). In higher education, Korean faculty comes under pressure to use English as a medium of instruction (EMI) in an attempt to enhance the global competitiveness of Korean universities and their international rankings (Cho & Palmer, 2013). But this has caused communication problems and limited understanding of the content areas due to lack of language competence of both Korean faculty and students. At the K-12 level, English teachers also feel a lot of pressure to teach English through English (TETE), but have also faced several issues, including large classroom size and lack of teachers' and students' English oral proficiency (Kang, 2008; Kim, 2009). Another more recent policy reform was to recruit and place Native English-Speaking Teachers (NEST) in K-12-level schools through the English Program in Korea (EPIK) and Teach and Learn in Korea (TaLK) (Jeon, 2012; Park, 2009a). These government-managed NEST hiring programs are designed to globalize Korea and bridge socio-economic gaps between rural and urban Korea.

More recently, the Lee Myeong Bak government (2008-2013) acknowledged the value of English language for political and socioeconomic benefits and reflected such perspectives in its English education policy: "Immersion program; extension of class hours of the English language in elementary and secondary schools; strengthening teacher training; strengthening English after school programs; change of English teacher selection process; change of English language testing system" (Kim, 2009, p. 126). The National English Ability Test or the Korean version of

TOEFL (measuring all four aspects of English proficiency) was developed to revamp the CSAT system, but this ambitious plan was in vain after the change of the new government (Song, 2014).

***Educational Factors***

South Korea has eagerly promoted an educational system designed to achieve a rapid economic growth during the past six decades. As a result, Korea has almost entirely eliminated its illiteracy rate and become one of the top performing countries in PISA and TIMSS tests (Mullis, Martin, Foy, & Arora, 2012; OECD, 2014). In addition, almost half of Korean adults (25-64 years old) have a tertiary degree, and 68% of young Korean adults (25-34 years old) have a tertiary qualification, the highest in the OECD (OECD, 2015). U.S. President Obama has repeatedly praised Korea's educational system (Fenton, 2015; The Korea Times, 2011). However, the Korean educational system has been often criticized for fueling the 'education fever' that promotes academic elitism and places a huge financial burden on millions of Koreans (Seth, 2002). OECD (2015) also reported, "Korea spends heavily on education as a share of its wealth overall, but public expenditure is low and the share of private expenditure among the highest in the OECD."

Why, then, are Korean parents frantically obsessed with their children's level of academic achievement? According to Seth (2002), Koreans have typically engaged in formal schooling for acquiring knowledge and attaining a higher social status. Thus, a degree from a top-tier university carries prestige and helps their children secure a well-paying job. For instance, Koreans with master's or doctoral degrees earn twice as much as the ones with upper secondary education (OECD, 2015). Additionally, as Kim and Kim (2016b) have indicated, Korean parents consider the academic success of their children as their own success, so that helping their children achieve academic success – from kindergarten (2 years), primary education (6 years),

secondary education (6 years), to tertiary education (4+ years) – is an important item on Korean parents' agenda. Since Korean students believe they can create a harmonious family life by obeying their parents (38.1%) and studying harder for their parents (16.1%), a majority of them study for extrinsic and instrumental motivation (e.g., getting into a prestigious university to make their parents feel proud). Thus, they excessively focus on getting high scores on tests in school.

The Korean parents' and students' oversensitivity over test scores affects teachers' instruction. Thus, it has put enormous pressure on K-12 teachers to use a "teaching to the test" method and increase the students' test scores (Sung & Kang, 2012). For instance, the 7th National Curriculum (1998 – present) clearly states that English education is for focusing on student-centeredness, using various activities and tasks, cultivating communicative competence, and fostering logical and creative thinking (National Curriculum Information Center, 2016). However, secondary school English teachers rarely use English as an EMI and Communicative Language Teaching (CLT) method in the classroom, but can't help but rely overly on grammar-translation activities (to prepare students for the form-focused university tests) because of the washback effect of the CSAT-oriented curriculum and instruction, plus the expectations of the students and their parents (Kim, 2009).

***Attitudes and Proficiencies in English***

Korean students' heavy reliance on extrinsic and instrumental motivation (e.g., obtaining high scores on tests or securing good employment) rather than intrinsic motivation (e.g., enjoying the learning process) affects their attitudes and proficiencies in English. Kim and Kim (2016) conduct a longitudinal study (2002-2010) on attitudes of Korean high school students toward English learning. Competitive motivation, which is similar to extrinsic and instrumental motivation (e.g., learning English for university and employment), was the most influential

factor for students' English performance. Given Korea's social and educational structure (that uses English proficiency scores as a measure for university admission, job employment, and promotion), a majority of Korean students tend to perceive English as "linguistic capital" and a means of competition to climb up "the social ladder" (Bourdieu, 1991; Kang, 2009; Seth, 2002; Zeng, 1995). As a result, Korean students consider English as one of the important academic subject matters, like math or science, rather than a communication tool (Kim & Kim, 2016a, 2016b). The washback effects of a high-stakes exam (CSAT), as well as social pressure act together to push students to become obsessed with exam-oriented English lessons (e.g., form-focused activities) instead of fostering communication skills (Davies, Brown, Elder, Hill, Lumley, & McNamara, 1999; Kim, 2009).

Korean university students also struggle to learn English for various reasons (e.g., lack of confidence in speaking English and competitive motivation) (Jung, 2011). This phenomenon is attributed to the ten years of formal education (that Korean university students spend learning English in the classroom) and the exam-oriented English lessons such as grammar-heavy teaching method (that they have become accustomed to) (Kim & Kim, 2016b). Although learning is a national obsession and Koreans invest huge amounts of money on English education, the English proficiency of Korean university students is less impressive. As previously mentioned, the Korean TOEFL speaking scores ranked 136 out of 161 countries (Kang, 2009; Shim & Park, 2008). During that same time frame, Moroccan EFL speakers performed better than their Korean counterparts on the speaking section.

**CALL and IDLE in South Korea**

How can Korea take full advantage of its rich resources in technology in order to address limitations of classroom-based instruction and enhance language acquisition in the EFL context

(Benson & Reinders, 2011; Dressman et al., 2016; Richards, 2015)? In the Korean EFL context, where the "digital divide" does not exist among young Korean students in this "tech-savvy" and technology-rich" society (e.g., almost every South Korean university student has a smartphone), can we learn lessons from the Moroccan EFL case and overcome this unfavorable language learning condition by implementing a wide range of technological resources (e.g., Twitter, social media, YouTube, smartphones) in language education?

Recently, Kim (2015) analyzed 118 Computer-Assisted Language Learning (CALL) studies (that were published in a leading national English education journal, *English Teaching*), from 1965 to 2015. She also classified CALL articles into five stages: 1) 1960-70s: the effect of language labs, 2) 1980s: broadcast media and videos, 3) 1990s: the advent of computer and multimedia, 4) 2000s: The World Wide Web and CMC, and 5) 2010s: Mobile-Assisted Language Learning (MALL).

Despite advanced CALL research in terms of topics, technologies, and pedagogies, Kim (2015) pointed out that the ICTs have not been fully integrated into classroom teaching in Korea. Thus, we would need more in-depth qualitative studies (including a thorough description of English learning contexts, participants, and students' learning processes using technologies) with potential research questions such as why the integration of ICT is not successful, what the obstacles are, how we could solve this dilemma and how we can meet English learners' and teachers' needs in terms of CALL. Based on this research background, this study specifically attempts to advance our understanding of 1) quantity and quality of IDLE activities engaged in by Korean EFL learners university students in relation to English learning outcomes and 2) EFL learners' WTC while involving IDLE activities and provide implications for classroom instruction, teacher education and English education policy.

# CHAPTER 3

# METHODOLOGY

## 3.1 Research Settings and Participants

In order to explore four research questions, data were originally generated from a total of 94 Korean undergraduate students enrolled in 15 different EFL classes of three separate universities, named here with the pseudonyms Korea Western University (KWU), Korea Eastern University (KEU), and Korea Central University (KCU). A survey instrument was distributed in the middle of fall semester 2016, followed by semi-structured interviews ($N = 94$). The data collection procedure proceeded with permission from three educational institutions, nine instructors, and the survey participants.

However, 10 students did not take one of the vocabulary tests, and 7 students engaged only in one type of IDLE activity (see *Data Analysis* for details). Except for these particular data, the data of remaining 77 participants (who participated in the survey and the interview and were involved in both form- and meaning-focused IDLE activities) were analyzed for the RQ1 (i.e., relationship between quantity/quality of IDLE and L2 English vocabulary measures) and RQ4 (i.e., factors that affect learners' WTC when engaging in IDLE activities). Their average age was 21.60, and ranged from 19-27 years of age, from KWU ($N = 28$, 36.4%), KEU ($N = 29$, 37.6%), and KCU ($N = 20$, 26%). At the time of this study, most students ($N = 70$, 90.9%) had been studying English for more than eight years. Specifically, as shown in Table 4, they consisted of male ($N = 22$, 28.6%) and female ($N = 55$, 71.4%), with a mixture of freshmen ($N = 23$, 29.9%), sophomores ($N = 30$, 39%), juniors ($N = 10$, 13%), and seniors ($N = 14$, 18.1%). They represented a range of different majors, such as English education ($N = 24$, 31.2%), English

literature ($N$ = 21, 27.3%), the humanities ($N$ = 16, 20.7%), engineering ($N$ = 8, 10.4%), and others ($N$ = 8, 10.4%).

The participants were considered a representative, homogenous group in terms of their geographical locations, access to English, and possession of digital devices, in that they were all living in major cities across Korea and carrying, on average, at least two digital devices (i.e., KWU, $M$ = 2.04, $SD$ = .64; KEU, $M$ = 2.34, $SD$ = .67; KCU, $M$ = 2.25, $SD$ = .64).

**Table 4. Demographic data of the participants for RQ 1 and 4**

| | | Total ($N$ = 77) | |
|---|---|---|---|
| | | $N$ | % |
| University | KWU | 28 | 36.4 |
| | KEU | 29 | 37.6 |
| | KCU | 20 | 26 |
| Grade | Freshman | 23 | 29.9 |
| | Sophomore | 30 | 39 |
| | Junior | 10 | 13 |
| | Senior | 14 | 18.1 |
| Gender | Male | 22 | 28.6 |
| | Female | 55 | 71.4 |
| Length of studying English | 6-7 years | 7 | 9.1 |
| | 8-9 years | 17 | 22.1 |
| | More than 10 years | 53 | 68.8 |
| Major | English education | 24 | 31.2 |
| | English literature | 21 | 27.3 |
| | The humanities | 16 | 20.7 |
| | Engineering | 8 | 10.4 |
| | Others | 8 | 10.4 |
| Number of digital devices | 1 | 10 | 13 |
| | 2 | 41 | 53.2 |
| | 3 | 26 | 33.8 |

As regards the RQ2 (i.e., relationship between quantity/quality of IDLE and L2 affective variables, standard English test, and productive language outcomes) and RQ3 (i.e., predicted influence of English outcomes on IDLE quality/quantity), the researcher only included students who have not lived/studied abroad in order to reduce any potential compounding variable due to

the following reason: Those with overseas experience may not truly reflect the perspective of typical Korean EFL learners because they tend to have more foreign friends (whom they befriended during their trips abroad) and thus have a much greater need to learn and use English for communication outside of the classroom, using digital technology. Previous studies (Kang, 2014; Yang & Kim, 2011) have also reported that overseas experiences could significantly influence Korean English learners' L2 state of anxiety and English abilities, which could affect the results of this study.

**Table 5. Demographic data of the participants for RQ 2 and 3**

| | | Total ($N$ = 71) | |
|---|---|---|---|
| | | $N$ | % |
| University | KWU | 33 | 46.5 |
| | KEU | 25 | 35.2 |
| | KCU | 13 | 18.3 |
| Grade | Freshman | 25 | 35.2 |
| | Sophomore | 28 | 39.4 |
| | Junior | 10 | 14.1 |
| | Senior | 8 | 11.3 |
| Gender | Male | 24 | 33.8 |
| | Female | 47 | 66.2 |
| Major | English education | 20 | 28.2 |
| | English literature | 14 | 19.7 |
| | The humanities | 19 | 26.8 |
| | Engineering | 10 | 14.1 |
| | Others | 8 | 11.2 |
| Number of digital devices | 1 | 10 | 14.1 |
| | 2 | 38 | 53.5 |
| | 3 | 23 | 32.4 |

Hence, the researcher drew only on data from 71 Korean EFL learners who lacked any overseas experience (average age = 21.55 ranging from 19 to 26) from KWU ($N$ = 33, 46.5%), KEU ($N$ = 25, 35.2%), and KCU ($N$ = 13, 18.3%). They consisted of freshmen ($N$ = 25, 35.2%), sophomores ($N$ = 28, 39.4%), juniors ($N$ = 10, 14.1%), and seniors ($N$ = 8, 11.3%), with male ($N$ = 24, 33.8%) and female ($N$ = 47, 66.2%). These students constituted a mix of various majors

such as English education (*N* = 20, 28.2%), English literature (*N* = 14, 19.7%), the humanities (*N* = 19, 26.8%), engineering (*N* = 10, 14.1%), and others (*N* = 8, 11.2%). Most participants (*N* = 64, 90.2%) had been studying English for more than eight years at the time of data collection. Finally, they possessed at least two different modes of digital devices (*M* = 2.18), such as desk computers, laptops, smartphones, tablets, or wearable devices. In contrast to the ownership ratio of Japanese EFL learners (74.3%) and Taiwanese EFL learners (87.3%) as reported in Stockwell and Liu (2015), the smartphone ownership of Korean EFL learners reached 100%, and two-third of the students (*N* = 61; 85.9%) owned one or two additional digital devices other than a smartphone. Table 5 shows overall demographic information of the participants for RQ 2 and 3.

### 3.2 Research Ethics

Data were collected between September 2016 and January 2017. The University of Illinois at Urbana-Champaign (UIUC) Institutional Review Board (IRB # 15121) has approved this study as of September 30, 2015.

Participants included volunteers from six classes taught in English by Native English Speaking Teachers and nine classes taught in native language by Korean Non-Native English Speaking Teachers. All participants were informed of study (e.g., aim, procedure, and benefits/risks) and invited to participate by the researcher and the instructors prior to data collection. If the students voluntarily agreed to participate, they were asked to complete the consent form and fill out the questionnaire in class. Pseudonyms were used to protect the identities of the participants.

### 3.3 Instruments and Data Collection

Drawing on mixed-methods, data were collected through a questionnaire, semi-structured interview, and English learning outcomes (i.e., confidence, enjoyment, anxiety, standardized

English test, receptive/productive vocabulary level tests, and speaking) (Creswell & Plano Clark, 2007).

**Questionnaire**

During the fall semester of 2016 I distributed the consent letters and questionnaires to students in their classrooms. A questionnaire consisting of three parts was designed to elicit students' demographic information, English learning outcomes, and frequency of IDLE activities (see *Appendix A*). During the pilot stage, a group of SLA researchers judged the content validity of the questionnaire and offered suggestions to improve it. The original English questionnaire items were also translated into Korean for Korean respondents and checked for the instruments' clarity and precision, using forward- and backward-translations. The first part (demographic information) asked questions concerning participants' individual backgrounds such as school, grade, gender, major, length of time studying English, overseas experiences, and number of digital devices.

The second part was designed to obtain students' psychological aspects of English levels (i.e., confidence, enjoyment, and anxiety) and standardized English ability (i.e., TOEIC score). In order to gauge students' general perceptions of learning English, the operationalization of each construct encompassed both formal purposes (e.g., working on a school project) and informal ones (e.g., casual chatting). The students answered a confidence item (i.e., 'I feel confident in using English well'), enjoyment (i.e., 'I enjoy learning English'), and anxiety (i.e., 'I feel nervous about communicating in English') using a five-point Likert scale, ranging from 1 = very weak to 5 = very strong. Although each psychological construct was assessed with a single-item questionnaire (e.g., Lai et al., 2015), a semi-structured interview provided much more detail about their interpretations of each construct. As for standardized English ability, the researcher

instructed students to provide TOEIC scores from tests taken within the past two years, as the official validated date for a TOEIC test score is also two years (Educational Testing Service, 2017). Since it was possible to give inaccurate numbers because of memory constraints or dishonesty, I checked the scores again during the interview.

For the third part (frequency of IDLE activities), participants answered an open-ended question item, "On average, how many hours each day did you spend in engaging in IDLE activities outside the classroom in the past 6 months?" which was modified from Lai et al.'s (2015) study. The concept 'IDLE' might appear vague; therefore, participants could interpret it in different ways. Hence, the term IDLE participants were instructed to refer to the term as "self-directed English learning using digital devices (e.g., smartphones, MP3, TV, desktop computers, and laptops) or resources such as the Internet, blogs, KaKaoTalk (Korea's popular social media platform), Facebook, Skype, online games and Web apps, which were not directly linked to formal language learning," along with various examples (see *Conceptualization of IDLE* session in Literature Review).

**Semi-structured interview**

I conducted semi-structured interviews with students who had submitted the signed consent form and completed the questionnaire. The purpose of the interview was to: 1) verify students' quantitative responses (e.g., psychological aspects of English levels, frequency of IDLE activities, and TOEIC score) for data triangulation, 2) obtain a deeper understanding of their questionnaire responses, 3) elicit the quality of their IDLE activities (see *Data Analysis* for details), and 4) understand the possible variables that may affect their WTC when engaging in IDLE activities. (see *Appendix B* for question items). Each interview was recorded and conducted in Korean extramurally for 30-60 minutes.

**English vocabulary measures**

Regarding English vocabulary measures, two widely used, reliable and validated English vocabulary tests (from the University World list) were adopted (Sundqvist, 2009; Sundqvist & Wikström, 2015; Sylvén & Sundqvist, 2012). Specifically, the Productive Vocabulary Levels Test (PVLT), which included 18 questions, asked participants to generate the correct word based on a few initial letters and a context sentence – e.g., "It's difficult to ass____ a person's true knowledge by one or two tests ('assess')" (Laufer & Nation, 1999). The Receptive Vocabulary Levels Test (RVLT), which also consisted of 18 questions, asked them to select the correct vocabulary word (e.g., wealth) out of six distractors (e.g., affluence, axis, episode, innovation, precision, and tissue) that would match each meaning (Nation, 1990). PVLT was designed to gauge students' productive vocabulary ability (e.g., using a word correctly), while RVLT was intended to measure receptive vocabulary ability (e.g., understanding a word) (see *Appendix C* for test items).

Using two components of vocabulary measures, a more comprehensive understanding of a student's vocabulary knowledge could be gained. PVLT and RVLT[3] were also easy to administer, in that participants in the classroom could take both tests within 10 minutes by using their own digital devices, as illustrated in Figure 1. The vocabulary test scores (out of a maximum of 100), which appeared automatically on the screen upon completion, were reported on the questionnaire.

[3] These are online vocabulary instruments, available to the public: For PVLT, visit http://tinyurl.com/ProductiveV. For RVLT, visit http://tinyurl.com/RecognitionV.

**Figure 1. Participants taking vocabulary tests by using their own digital devices**


**Speaking outcome**

Apart from the psychological aspects of English outcomes and English vocabulary outcomes, I assessed a speaking outcome, which helped me gain a more holistic understanding of students' language abilities, particularly productive language outcomes.

More specifically, I administered English oral tests for five minutes to all participants. They were asked to speak about their own personal opinions and recollections on topics such as hobbies, food, and motivation to learn English. The students' responses were recorded for a later rating.

In December of 2016, three English raters (one certified rater and two seasoned English teachers) were recruited to evaluate all speaking samples based on modified TOEFL Speaking Rubrics (see *Appendix D*). There was a brief training session before the actual evaluation. For 20

minutes, the raters received the information regarding the purpose of the study, the criteria for scoring, the content of the test and other details before the evaluation. Then, they had a training session to practice by listening to five sample data and checked the internal reliability. Of these samples, two were chosen to be representative of the top 10% of the participants, one of the middle level, and two of the lower 10%. It was designed to allow the raters to gain overall criteria for each group (i.e., low, average, and high proficiency groups) through this training session. Inter-rater reliability for English speaking was assessed using the Intraclass Correlation Coefficient (ICC), which resulted in a score of .830 ($p < 0.001$), thus showing a high level of inter-rater reliability among raters (Shrout & Fleiss, 1979).

**3.4 Data Analysis**

To answer RQ1, the quantitative survey data were analyzed using IBM SPSS Statistics 24. As for the relationship between the quantity of IDLE activities and vocabulary test scores, students were classified into three IDLE groups – i.e., Low-IDLE (<1 h/day), Mid-IDLE (1-2 h/day), and High-IDLE group (≥2 h/day) – based on average hours for daily IDLE activities (Lai et al., 2015; Sundqvist & Wikström, 2015). A Spearman Correlation analysis was carried out to examine the correlation between three IDLE groups (ordinal variables) and vocabulary outcomes (continuous variables).

When it comes to an association between the diversity of IDLE and L2 vocabulary outcomes, the analysis followed four steps. The qualitative interview data were first transcribed verbatim. Second, I adopted Lai et al.'s (2015) "the diversity of the holistic learning ecology"[4] as an appropriate analytic framework to analyze the quality of IDLE. Specifically, they defined

[4] Diversity of IDLE, which combines various types of form- and meaning-focused activities, can come in complementary forms for creating positive synergic effects, which could lead to a healthy learning ecology for language learners.

‘quality-learning experiences’ as “activities that complemented in-class learning experiences and struck a balance between focus on form and focus on meaning in the holistic learning experience” (p. 286). That is, students who involve themselves in diversity of IDLE activities that strike a balance between form- and meaning-focused activities can create a healthy IDLE ecology that leads to positive English learning outcomes.

Accordingly, the relevant data were sorted, coded, and synthesized while filtering out irrelevant data. Specifically, a form-focused IDLE (FFI) activity indicated that students paid more attention to the accuracy of linguistic forms in relatively structured digital settings (e.g., using Google translation software to translate from English to Korean, or using a dictionary app to look up an English word). On the other hand, a meaning-focused IDLE (MFI) activity pointed to students focusing more on the fluency of authentic language use in unstructured, naturalistic digital settings (e.g., playing a multiplayer online game in English, or chatting via social media with other English users). Third, the diversity of IDLE was calculated by counting the number of FFI and MFI activities. Since “using Google translator” or “chatting with other English users on Facebook” could be both FFI and MFI activities, the ultimate decision was made based on the individuals’ intentions elicited from their interview responses. Additionally, if the student engaged only in one type of IDLE activity (e.g., FFI = 5, MFI = 0), this data was excluded from the analysis because it would not reflect the diversity of IDLE. Finally, the relationship between the diversity of IDLE activities (discrete data) and vocabulary test scores (continuous data) was measured using a Pearson correlation and stepwise linear regressions.

To answer RQ2, students were also classified into three IDLE groups – i.e., Low-IDLE (<1 h/day), Mid-IDLE (1-2 h/day), and High-IDLE group (≥2 h/day) – based on average hours for daily IDLE activities. A Spearman Correlation analysis was also conducted to examine the

correlation between three IDLE groups (ordinal variables) and six English learning outcomes (continuous variables). I treated Likert-type items of confidence, enjoyment, and anxiety as numeric values (or continuous data) because this study investigates how those scores would differ according to three IDLE groups (Rao & Sinharay, 2007). As regards a relationship between the diversity of IDLE and the English learning outcomes, the analysis also followed the above, similar steps except that I calculated the relationship between six indicators of English learning outcomes (continuous data) and the diversity of IDLE activities (discrete data) using a Pearson correlation.

To answer RQ3, an ordinal regression was conducted to determine which of the continuous independent variables (six indicators of English outcomes) would have a statistically significant effect on ordinal-dependent variables (low-mid-high IDLE groups). Tests whether the data met the assumption of collinearity demonstrated that multicollinearity was not a concern (Speaking, Tolerance = .63, VIF = 1.60; PVLT, Tolerance = .43, VIF = 2.31, TOEIC, Tolerance = .53, VIF = 1.91, Confidence, Tolerance = .36, VIF = 2.78, Enjoyment, Tolerance = .35, VIF = 2.84, Anxiety, Tolerance = .77, VIF = 1.29). Additionally, eight students did not take a vocabulary test, so there were eight missing values on PVLT (11.3%). In order to improve statistical power, Little's MCAR test was first conducted to investigate whether values were completely missing randomly. The result showed a Chi-Square = 4.01 ($df = 5$; $p = .55$), which indicated that the missing value occurred entirely at random. Then, the expectation-maximization (EM) technique was undertaken to replace missing values with imputed values (Dempster, Laird, & Rubin, 1977).

Subsequently, multiple linear regressions were conducted to investigate which factors have a positive influence on students' engagement in IDLE quality. For the individual case

analysis, I adopted a grounded theory approach to guide the recursive data analysis and identify the themed findings (Strauss & Corbin, 1998). Finally, member checking was also carried out via email correspondence and individual interviews by debriefing and sharing preliminary results from the analysis (LeCompte, 2000).

Finally, to answer RQ4, as a basis for this approach, I used Miles and Huberman's (1994) framework of data analysis: data reduction, data display, and conclusion-drawing and verification. Specifically, after completing an interview, I transcribed and translated it into English, and doubled-checked the accuracy of my translation through member checking and communicating with an experienced EFL instructor via email correspondence and face-to-face meetings. Second, I reiteratively read interview transcripts and field notes to familiarize myself with the data. Third, informed by MacIntyre et al.'s (1998) theoretical framework, I made a conscious effort to identify, code, and synthesize recurring themes related to the research question, and to filter out extraneous data with the help of NVivo 11.4.1 qualitative analysis software. For example, the codes (i.e., 2$^{nd}$ order concepts), such as "familiarity with interlocutors" and "familiarity with communities," were grouped into the analytic category (i.e., 1$^{st}$ order themes), titled "contextual variables." Interview field notes were also used to complement the coding process.

Finally, two other researchers verified the coding scheme with 90% inter-coder reliability. Detailed presentation of the final coding structure is illustrated in Table 6. The themes and excerpts that reflect the coding structure are reported in the Findings section. All names of the participants and schools are pseudonyms—to protect their identity and confidentiality. The Findings section will present the analytic results in the sequence of the coding structure: the first-

layer headings of each section indicate the first order theme in the coding structure; while in the sub-section the second order concepts are inserted in the elaborations.

**Table 6. The Final Coding Structure and Tabulated Supporting Sections**

| 1st order themes (constructs) | 2nd order concepts |
|---|---|
| 1. Sociopolitical variables (106) | L2 communication practice (64) |
| | Social anxiety (42) |
| 2. Contextual variables (61) | Familiarity with interlocutors (44) |
| | Familiarity with communities (17) |
| 3. Individual variable (25) | L2 self-confidence (25) |

Note: The number in the bracket indicates the number of that particular point of view that participants expressed.

# CHAPTER 4

# RESULTS

## 4.1 Quantity/Quality of IDLE and English Vocabulary Measures

### Descriptive Data

As regards the frequency of IDLE experiences, 49.4% ($N = 38$) of the participants reported spending less than one hour a day engaging in IDLE activities during the previous six months, followed by 27.3% ($N = 21$), who reported between one and two hours, and 23.3% ($N = 18$), who stated more than two hours (see Table 7). It shows that a majority of the participants ($N = 59$, 76.7%) were low or moderate IDLE learners. There was not a significant difference in the IDLE quantity for English majors ($M = .89$, $SD = .80$) and non-English majors ($M = .53$, $SD = .80$); t (75) = 1.93, $p = .06$). This result suggests that participants' major does not have any effect on IDLE quantity.

**Table 7. Descriptive Data on IDLE Quantity**

| | | Scale | Frequency | Percent |
|---|---|---|---|---|
| IDLE Quantity | Low-IDLE | <1 h/day | 38 | 49.4 |
| | Mid-IDLE | 1-2 h/day | 21 | 27.3 |
| | High-IDLE | ≥2 h/day | 18 | 23.3 |
| | Total | | 77 | 100 |

Table 8 shows types of IDLE activities practiced by Korean EFL university students. The excerpts presented below are selected based on two criteria: (1) when informants give insights into types of IDLE activities and (2) when they reflect the representative opinion of each category. All names of the participants are pseudonyms—to protect their identity and confidentiality.

**Table 8. Profiling types of IDLE activities practiced by Korean EFL university students**

| Category | Number of responders (*n*) | Percentage of each category (%) |
|---|---|---|
| Watching documentary, drama, movie, and talk-show | 88 | 88.9 |
| Using social media (e.g., *Facebook, KaKaoTalk, Instagram, Twitter, Meipai, Skype*) | 56 | 56.6 |
| Using search engines for finding information, looking up vocabularies, and translating (e.g., *Naver, Google, Yahoo*) | 44 | 44.4 |
| Listening to English podcasts, songs, and news | 43 | 43.4 |
| Using web applications (e.g., *Watcha, Superfan, Pinterest, Omegle*) | 32 | 32.3 |
| Engaging in virtual communities (e.g., Fandom group, digital game blog, special interest groups, *SoundCloud*) | 30 | 30.3 |
| Using an email and telephone for English practice | 11 | 11.1 |

*Watching documentary, drama, movie, and talk-show*

Hasong: I love watching *Discovery Channel*. I also watch popular American comedies such as *Modern Family* while reading the script. I learn advanced English vocabularies and phrases that appear in the comedy program, so that I can use authentic American English.

Aeji: I watch a movie *Harry Potter* several times. I also read *Harry Potter* series in English. It helps me better understand the content. I have acquired a lot of English vocabularies and expressions. It is fun, so I keep reading and watching *Harry Potter*.

Dongwan: I watch American dramas such as *House of Cards* through *Netflix* and try to learn and use authentic English expressions...When I hear English expressions such as "let's call it a day" from the drama, I write it down and use it later in a real-life situation.

Mirae: I subscribe and watch funny *YouTube* videos in English.

Sooyeong: I subscribe to see *YouTube* videos about beauty, fashion and design in English. I try to watch them without any subtitle.

Seongmi: I love to watch indie movies of any kind such as *20th Century Women*, a family movie describing a conflict between a mother and a son. So far, I have watched it at least five times. When I hear good English vocabularies and expressions, I write them down in my notebook for later use. I practice by talking to myself using new words and phrases. Then I talk to my close friends using these expressions before actually applying them to real-life situations.

*Using social media (e.g., Facebook, KaKaoTalk, Instagram, Twitter, Meipai, Skype)*

Seonwoo: I talk to my foreign friends on *Instagram*. Here, I only communicate with my closed friends...I am extremely cautious about my personal information being exposed to others on *Facebook*...On *Twitter*, I follow my favorite politicians and celebrities...I like Chinese idol bands. In China, *Facebook* is not legal, so I use *Meipai* (a Chinese version of *Instagram*) to follow my favorite Chinese celebrities.

Jiseong: I am a monthly English magazine reporter in college. When I work with a native English-speaking editor, he offers me comments and corrections of my article via *KaKaoTalk*.

Hyewon: I feel more confortable when talking to my foreign friends on *Facebook Messenger* because I can check my message for grammatical mistakes before sending it out to my friends. I can look up vocabularies in online dictionaries or find appropriate expressions on *Google* search.

Hasong: I follow several English news channels such as *CNN* and *BBC* and documentary channels such as *National Geographic* on *Facebook* pages. I also follow entertainment

*Facebook* pages. People's comments on videos are all in English, so I can not only acquire authentic English expressions but also gain diverse perspectives about current issues. Sometimes, I also post my opinions about a certain topic on the page.

Ayoung: I learn English and job skills from missionary teachers on *Skype* for 30 minutes once a week.

*Using search engines for finding information, looking up vocabularies, and translating (e.g., Naver, Google, Yahoo)*

Changhyun: I love to watch American movies such as *Indiana Jones and the Kingdom of the Crystal Skull*. When I find there is a problem with a particular subtitle, I write it down, copy and paste the text on *Naver* and *Google* search engines, and try to figure out the correct meaning of that sentence on my own.

Jinho: I study English for two hours everyday. I watch American dramas a lot. It is fun. I have watched *Friends* over 100 times. It is a masterpiece. I memorize almost every English expression in *Friends*. I pick up American slang words and phrases. Now I try to watch it without any subtitle. But when I encounter an English idiom or phrase that I don't understand, I try to search that information on *Google* or other search engines.

Hojeong: When I search a word "ridiculous" in *Naver English Dictionary*, it provides synonyms such as "funny." But its meaning may be different in different contexts. So I also search it on *Google* to learn how the word "ridiculous" is actually used in a particular context. In this way, I can have a nuanced understanding of how a word with a similar meaning such as "funny" is slightly different from "ridiculous."

Yookyoung: I am a member of English debate team in my college. To prepare for the debate, I first search basic facts and information about a particular topic on *Naver*. Then I

search the same type of information on *Google* and *Wikipedia* to get a deeper understanding of the topic. In this way, I can also double check and determine if the source is credible.

Seoyoung: I love to listen to pop songs. If there some particular lyrics from a song I do not understand, I copy and paste them onto *Google Translate*. It helps me figure out its meaning.

Taewon: I do physical exercise everyday. To get new and useful information about exercise, I go to *Bodybuilding.com*. It has rich resources and information about exercise and physical fitness. Recently, I watched a video clip "How to squat" and learned several tips and techniques to help me do a squat correctly. Professional fitness instructors explain it in a plain English. I have been practicing it for a long time.

*Listening to English podcasts, songs, and news*

Boram: I learn English through free English podcasts. I subscribe to a podcast *Good Morning Pops*, which is a radio program to teach English to English learners in Korea. I also listen to *6 Minute English* program provided by *BBC Radio*. It is free, and I can download lessons with audio files, transcripts and vocabulary lists. I use these content when I teach middle school students English in private institution.

Aesul: Since I was a little kid, I have been listening to *World News Review* provided by Korea's *Educational Broadcasting System (EBS)* program. It selects one news clip from *ABC*, *BBC*, and *Voice of America (VOA)* and offers a detailed explanation in Korean for 20 minutes. My English listening skill has drastically improved by listening to it regularly.

Jisu: I am willing to speak with British accents. So I often watch *BBC* news with an English subtitle. My favorite activity is to imitate that British English pronunciation and intonation. It sounds very elegant.

Daewon: I read Korean newspapers for an hour everyday, but they do not seem to provide enough insights into international issues. So I subscribe to *CNN Students News Podcast*, which provides 10-minute latest news for secondary students. I like its rich and diverse content ranging from US presidential election to international events. I primarily use it for acquiring additional knowledge.

Dongwhan: I am a vocal singer and composer in the singing group. I love to read and analyze lyrics of pop songs. For instance, in Adele's song *Hello*, there is a line in the lyrics "Hello from the other side." I like this kind of beautiful lyrics. I analyze the lyrics, discuss its meaning with my friends, and sometimes use it when writing an email to my foreign friend.

*Using web applications (e.g., Watcha, Superfan, Pinterest, Omegle)*

Jinju: I have application *Watcha* on my smartphone. This app is developed by a Korean company to watch latest American and British dramas and movies. I also have *Daum Dictionary* on my smartphone (also developed by a Korean company *Daum Communications*).

Jiyoung: I often use an English learning app *Superfan*. I can watch American movies and American television soap operas. It is very authentic and practical. It has a 'repetition' function. I can choose and repeatedly listen to a particular scene while practicing the pronunciation. There is also a 'dictation' function, so it helps improve my English listening skill.

Hojeong: I use *Pinterest* app on my mobile device. It is a photo and video sharing website. But I can learn how foreigners crack a short joke in English and how they think about a particular issue. This is very authentic! It is similar to *Tumblr*. For example, I watch some interesting videos, followed by reading people's comments about these videos. This is my way of learning 'real' global issue and culture.

Euyeon: I often talk to strangers in English through a chatting site *Omegle*. I feel more confortable there because I talk to people who do not know me.

*Engaging in virtual communities (e.g., Fandom group, digital game blog, special interest groups, SoundCloud)*

Mirae: I am Korean *TED Talk* translator. I am an active member of engaging in the *TED Talk* and *Korea TESOL Facebook* communities.

Seokhwan: I often play a massively multiplayer online role-playing game *StarCraft 2* with American gamers. We have to talk about game strategies during the game play so that we can play better as a team. I am also a member of several *StarCraft 2* online communities and engage in various conversations relating to *StarCraft 2*.

Hayoung: I prefer to write something in English using my virtual avatars. I feel more comfortable talking to others by using avatars in virtual worlds than being in face-to-face situations.

Sunwoo: I like *Big Bang* (a Korean idol band). I often visit its official fan club websites in order to keep up with their latest news and tour schedule. I can read various opinions and reactions regarding a particular matter posted in English by *Big Bang* fans from around the world. I use *Tistory* (a blogging platform developed by *Daum Communications*) to share my thoughts and experience about *Big Bang*.

Jinhan: After I uploaded my rap songs to *SoundCloud*, one German amateur singer contacted me. Now we have become *Facebook* friends. I can also view comments left in English on my tracks by visitors from all over the world. So far I have created over 70 rap songs, and around 14 songs are currently available in *SoundCloud*.

*Using an email and telephone for English practice*

Myeongseo: I have been practicing my speaking skills through telephone English since middle school.

Yurim: I receive news articles from *BBC* and *CNN* regularly via my email.

Table 9 shows descriptive information about the quality of IDLE activities and English vocabulary test scores. It indicates that students engaged more in MFI ($M$ = 6.8, $SD$ = 4.68) than FFI ($M$ = 2.9, $SD$ = 1.35). These students also were involved with, on average, 9 different activities regarding diversity of IDLE ($M$ = 9.7, $SD$ = 5.42). Unlike the result of IDLE quantity, there was a significant difference in IDLE quality for English majors ($M$ = 11.87, $SD$ = 5.47) and non-English majors ($M$ = 6.53, $SD$ = 3.51); t (75) = 4.85, $p$ = .00. This implies that participants' major does have an effect on IDLE quality.

**Table 9. Descriptive Data on IDLE Quality and English Vocabulary Tests**

| | | *Scale* | *Mix.* | *Max.* | *M* | *SD* |
|---|---|---|---|---|---|---|
| IDLE Quality | Form-focused IDLE (FFI) | No. of FFI | 1 | 8 | 2.9 | 1.35 |
| | Meaning-focused IDLE (MFI) | No. of MFI | 1 | 21 | 6.8 | 4.68 |
| | Diversity of IDLE | No. of FFI & MFI | 2 | 24 | 9.7 | 5.42 |
| English Vocabulary Tests | PVLT | No. of test scores (out of 100) | 8 | 94 | 42.86 | 25.07 |
| | RVLT | No. of test scores (out of 100) | 17 | 100 | 84.25 | 19.87 |

Table 9 also shows that the RVLT score ($M$ = 84.25, $Mdn$ = 94, $SD$ = 19.87) was

negatively skewed, with a skewness of -1.78 (*SE* = .27) and a kurtosis of 2.83 (*SE* = .54), which suggests that most students performed extremely well. In contrast, the PVLT score (*M* = 42.86, *Mdn* = 38, *SD* = 25.07) was positively skewed with a skewness of .47 (*SE* = .27) and a kurtosis of -1.02 (*SE* = .54), which suggests that most students performed poorly, but a few did well. These findings suggest that the Korean EFL students had more receptive lexical knowledge than productive knowledge, which is consistent with previous studies (Lee, Chon, & Shin, 2012; Shin, Chon, & Kim, 2011).

**Relationship between quantity of IDLE and English vocabulary measures**

Table 10 shows the results of correlations between the quantity of IDLE and English vocabulary scores for participants. Accordingly, there were no correlations between these variables in the total sample. This indicates that the quantity of IDLE was not closely associated with the vocabulary test score. This finding is supported by Lai et al.'s (2015) study, which stated that merely involving students in extramural language activities may not necessarily enhance their language outcomes. That is, some students may engage only in form-focused language learning, such as studying grammar and memorizing vocabulary for many hours, which is a unhealthy learning ecology and thus not associated with good language learning outcomes (ibid).

**Table 10. Correlations among IDLE Quantity and Vocabulary Tests**

| | PVLT | RVLT |
|---|---|---|
| Correlation Coefficient | .04 | .09 |
| Sig. (2-tailed) | .76 | .46 |
| *N* | 77 | 77 |

**Relationship between quality of IDLE and English vocabulary measures**

As shown in Table 11, the correlation analysis shows that the quality of IDLE activities

correlated significantly with both PVLT and RVLT scores. In particular, the more diverse the IDLE activities that participants became involved in, the higher the PVLT ($r$ = .46, $p$ = .00) and RVLT ($r$ =. 27, $p$ = .02) scores they achieved. This data suggests that the quality (diversity) of IDLE activities was significantly associated with both indicators of vocabulary knowledge.

**Table 11. Correlations between IDLE Quality and Vocabulary Tests**

| | PVLT | RVLT |
|---|---|---|
| Correlation Coefficient | .46 | .27 |
| Sig. (2-tailed) | .00 | .02 |
| *N* | 77 | 77 |

The regression model shows that the quality of IDLE had a significant influence on PVLT scores (Table 12). Quality of IDLE alone explains 20% of the variance in the dependent variable. This suggests that the more students engage in the quality of IDLE activities, the greater is the likelihood that they will obtain PVLT scores. Likewise, the regression model also shows that the quality of IDLE had a significant influence on RVLT scores. This model explains 6% of the variance in the dependent variable. It also indicates that the more frequently students engage in quality of IDLE activities, it is more likely that they will obtain RVLT scores. These findings are also consistent with previous studies that highlight the importance of achieving a balance in both form- and meaning-focused language learning for the quality of an IDLE learning experience (Lai et al., 2015).

**Table 12. Predicted Influence of IDLE Quality on Vocabulary Test Scores**

| Model | Predictor | Unstandardized Coefficient | | Standardized Coefficient | | *P* | F | Adjusted R Square |
|---|---|---|---|---|---|---|---|---|
| | | B | SE | Beta | t | | | |
| PVLT | (Constant) | 22.23 | 5.24 | | 4.26 | .00 | 20.36 | .20 |
| | IDLE Quality | 2.14 | .47 | .46 | 4.51 | .00 | | |
| RVLT | (Constant) | 74.61 | 4.50 | | 16.57 | .00 | 6.01 | .06 |
| | IDLE Quality | 1.00 | .41 | .27 | 2.45 | .02 | | |

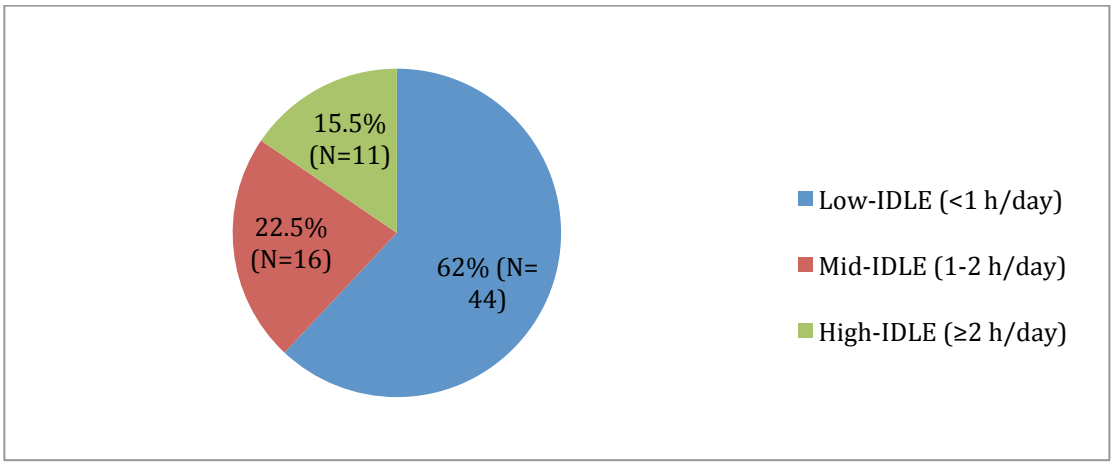
To control a potential confounding variable (i.e., IDLE quantity), hierarchical multiple regression was also performed. The IDLE quantity was entered as Block 1, and IDLE quality was entered as Block 2. Analyses took PVLT and RVLT as the dependent variables, respectively. For PVLT, Model 1 (IDLE quantity) did not reach significance ($p$ = .71). In Model 2, IDLE quality was the only predictor variable that made a significant contribution to the PVLT model ($\beta$ = .50, $p$ = .00), while IDLE quantity was not statistically significant (p = .12). For RVLT, Model 1 (IDLE quantity) was not significant ($p$ = .21). In Model 2, IDLE quality made a significant contribution ($\beta$ = .25, $p$ = .03), while IDLE quantity was not significant ($p$ = .48).

Qualitative data also supported previous findings that the quality of IDLE would significantly predict two vocabulary outcomes. There were two telling examples of quality-oriented IDLE experiences. First, there was Yuri, a female freshman majoring in English at Metropolitan University. She attributed 15 percent (out of 100%) of her English learning outcomes to formal learning and 70 percent to IDLE. She spent 1-2 hours daily involved in IDLE activities (i.e., IG1) while engaging in an optimal diversity of IDLE experiences (i.e., FFI = 5, MFI = 11). For example, she read English texts on a smartphone, watched American dramas on YouTube, worked as a volunteer translator to subtitle TED Talks, interacted with her foreign friends on Facebook, and became involved a Korean TESOL community on Facebook SIG—all on a daily basis. All of these activities may well have contributed to her receptive (i.e., RVLT = 100) and productive vocabulary skills (i.e., PVLT = 94).

And, another prime example was Jieun, a female sophomore majoring in business at Southeast University. Her goal for starting her own business and living an independent life after graduation has motivated her to engage in a variety of IDLE activities. She attributed 0 percent

of her English learning outcomes to formal learning and 80 percent to IDLE. She spent less than one hour daily performing IDLE activities (i.e., IG0) while practicing eight different IDLE experiences (i.e., FFI = 2, MFI = 6). For instance, she looked up words through an online dictionary, watched American dramas, interacted with her foreign pen pals online, practiced her spoken English via Skype, and talked to her native English speaking teacher via KaKaoTalk. Apart from the IDLE practices, she was learning various metacognitive English learning strategies from Korea's popular blog, "Ways to study English," and she recently joined the English Free Talking Club on campus. Consequently, all of her IDLE practices may have contributed to her increased receptive (RVLT = 89) and productive vocabulary skills (i.e., PVLT = 55).

**Figure 2. Quantity of IDLE practices**




### 4.2 Quantity/Quality of IDLE and Affective Variables, Standard English Test, and Productive Language Outcomes

#### Descriptive Data

According to the quantity of IDLE experiences (Figure 2), 62% ($N$ = 44) of the students spent less than one hour on IDLE practices on a daily basis, followed by 22.5% ($N$ = 16) who did between one and two hours, and 15.5% ($N$ = 11) with more than two hours.

Table 13 shows descriptive information on the quality of participants' IDLE practices. Overall, the students ($N$ = 71) involved about eight different IDLE activities that combined form-focused learning and meaning-focused learning. It also shows that they had a far wider range of MFI (ranging from 1 to 18) than FFI (ranging from 1 to 8) regarding IDLE practice. However, there was no correlation between the number of digital devices and IDLE quantity ($r_s$ = .05, $p$ = .68) as well as quality ($r_s$ = -.09, $p$ = .47), which suggests that the number of digital devices that students possessed was not connected to both types of IDLE activities.

**Table 13. Descriptive data on IDLE quality**

| Variables | Scale | Min. | Max. | *M* | *SD* | *N* |
|---|---|---|---|---|---|---|
| FFI | Number of FFI | 1 | 8 | 2.79 | 1.47 | 71 |
| MFI | Number of MFI | 1 | 18 | 5.20 | 4.41 | 71 |
| IDLE Quality | Sum of FFI & MFI | 2 | 21 | 7.99 | 5.26 | 71 |

Note: FFI=Form-Focused IDLE; MFI=Meaning-Focused IDLE

Table 14 shows participants' descriptive data on English learning outcomes. In general, they gave somewhat positive ratings for confidence ($M$ = 3.01, $SD$ = 1.1), enjoyment ($M$ = 3.38, $SD$ = 1.2) and anxiety ($M$ = 3.18, $SD$ = 1.1). This suggests that although Korean EFL learners felt confident about using English and enjoyed learning English, they were also anxious about communicating in English. This may be because these participants have few opportunities to use English or have encountered several frustrating situations that make them feel anxious about using English (Pyun, Kim, Cho, & Lee, 2014). There were wide distributions among students across TOEIC scores ($M$ = 679.2, $SD$ = 193.6, ranging from 200 to 980), speaking ($M$ = 74.03, $SD$ = 12.1, ranging from 55 to 100), and PVLT ($M$ = 35.41, $SD$ = 22, ranging from 8 to 88).

**Table 14. Descriptive data on English learning outcomes**

| Variables | Scale | Min. | Max. | *M* | *SD* | *N* |
|---|---|---|---|---|---|---|
| Confidence | 1-5 (5 = Very strong) | 1 | 5 | 3.01 | 1.1 | 71 |
| Enjoyment | | 1 | 5 | 3.38 | 1.2 | 71 |
| Anxiety | | 1 | 5 | 3.18 | 1.1 | 71 |
| Speaking | Test Score (out of 100) | 55 | 100 | 74.03 | 12.1 | 71 |
| PVLT | | 8 | 88 | 36.29 | 21.37 | 71 |
| TOEIC | Test Score (out of 990) | 200 | 980 | 679.2 | 193.6 | 71 |

**Quantity of IDLE and English Outcomes**

Based on the results of Spearman's correlation analysis (Table 15), the quantity of IDLE and four indicators of language outcomes (i.e., enjoyment, confidence, anxiety, and TOEIC) were significantly correlated, but not with speaking and PVLT. This suggests that the quantity of IDLE is significantly associated with affective domains (i.e., enjoyment, confidence, and anxiety) and standardized tests (i.e., TOEIC) but not with productive language outcomes. In other words, more frequent IDLE individuals tend to have greater affective variables and TOEIC scores.

**Table 15. Correlation between IDLE quantity and English learning outcomes**

| Category | Variable | *N* | $r_s$ | $\rho$ |
|---|---|---|---|---|
| Affective | Confidence | 71 | .36 | .00 |
| | Enjoyment | 71 | .40 | .00 |
| | Anxiety | 71 | -.25 | .04 |
| Productive | Speaking | 71 | .22 | .07 |
| | PVLT | 71 | .22 | .07 |
| Standardized Test | TOEIC | 71 | .26 | .03 |

Pearson's correlation analysis (Table 16) indicates that the quality of IDLE activities correlated significantly with all English learning outcomes. In particular, there was a high strength of correlations between IDLE quality and speaking ($r$ = .56, $p$ = 00) and PVLT ($r$ = .54, $p$ = 00). This finding suggests that the quality of IDLE activities was more positively associated with productive language outcomes.

**Table 16. Correlation between IDLE quality and English learning outcomes**

| Category | Variable | *N* | *r* | *ρ* |
|---|---|---|---|---|
| Affective | Confidence | 71 | .34 | .00 |
| | Enjoyment | 71 | .29 | .02 |
| | Anxiety | 71 | -.25 | .04 |
| Productive | Speaking | 71 | .56 | .00 |
| | PVLT | 71 | .54 | .00 |
| Standardized Test | TOEIC | 71 | .47 | .00 |

### 4.3 Predicted Influence of English Outcomes on IDLE Quality/Quantity

Table 17 displays the findings of the ordinal logistic regression analyses that examined factors influencing the frequency of IDLE activities. The model showed a good fit, as it was significant ($p$ = .00), and the pseudo-$R^2$ of this model was .28, which indicates that overall model was significant and English outcomes accounted for approximately 28% of the variances in IDLE quantity.

The test of parallel line did not reject the null hypothesis ($p$ > .05) and the Pearson Chi-Square goodness-of-fit measure was non-significant, suggesting a good fit. These summary measures suggest that the satisfactory ordinal logistic regression model fits. The estimate for enjoyment (beta estimate = 1.02, $p$ = .01) and anxiety (beta estimate = - .72, $p$ = .01) were significant, showing that both values were significant predictors of students' IDLE quantity. This suggests that students who enjoy learning English and have a low level of English anxiety are likely to spend more time engaging in IDLE activities.

**Table 17. Results of Ordinal logistic regression (Using logit Link Function)**

| | Variable | Estimate | SE | Wald | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | | | | | | Lower Bound | Upper Bound |
| Threshold | Low-IDLE | 1.67 | 2.14 | .61 | .44 | -2.53 | 5.86 |
| | Mid-IDLE | 3.17 | 2.16 | 2.15 | .14 | -1.07 | 7.41 |
| Location | Confidence | -.23 | .40 | .33 | .57 | -1.02 | .56 |
| | Enjoyment | 1.02 | .41 | 6.17 | .01 | .22 | 1.82 |
| | Anxiety | -.72 | .29 | 6.10 | .01 | -1.29 | -.15 |
| | TOEIC | .00 | .00 | .84 | .36 | -.00 | .01 |
| | Speaking | -.01 | .03 | .04 | .85 | -.06 | .05 |
| | PVLT | -.01 | .02 | .15 | .70 | -.04 | .03 |

Model Fit: LR Chi-Square (6) = 19.39 ($p$ = .00);
Pseudo $R^2$ = .28;
Goodness-of-Fit: 1) Pearson Chi-Square (134) = 126.85 ($p$ = .66),
2) Deviance Chi-Square (134) = 111.42 ($p$ = .92);
Test of parallel Lines: Chi-Square (6) = 13.097 ($p$ = .04)

Note: a. Dependent variables: Three IDLE Quantity groups

A multiple linear regression was conducted to determine how six indicators of English outcomes would predict IDLE quality. Table 18 shows that three variables were significant predictors of IDLE quality, which explained 43% of the variance ($R^2$ = .43, F (6,70) = 9.85, $\rho$ = .00). Specifically, it found that PLVT significantly predicted IDLE quality ($\beta$ = .37, $p$ = .01), followed by anxiety ($\beta$ = - .29, $p$ = .01) and speaking ($\beta$ = .27, $p$ = .02).

**Table 18. Linear regression of language-related variables on IDLE quality**

| Model | Predictors | *B* | *SE* | *β* | *T* | *ρ* |
|---|---|---|---|---|---|---|
| IDLE Quality | Constant | -1.72 | 3.97 | | -.43 | .67 |
| | PLVT | .09 | .04 | .37 | 2.65 | .01 |
| | Speaking | .12 | .05 | .27 | 2.34 | .02 |
| | Anxiety | -1.42 | .50 | -.29 | -2.87 | .01 |
| | TOEIC | .00 | .00 | .08 | .61 | .55 |
| | Enjoyment | .01 | .69 | .00 | .01 | .99 |
| | Confidence | .20 | .73 | .04 | .28 | .78 |

Note: $N$ = 71; $R^2$ = .48; Adjusted $R^2$ = .43; F (6,70) = 9.85, $\rho$ = .00

### 4.4 Factors that affect learners' WTC when engaging in IDLE activities

*Sociopolitical variables*

*L2 communication practice.* L2 communication practice played a critical role in affecting EFL learners' WTC in the IDLE context. A majority of the participants mentioned teacher-centered, de-contextualized and test-oriented instruction to account for the variation in their L2 WTC in the IDLE context. For instance, Ji-eun ascribed becoming a passive L2 user in digital environments to teacher-centered English pedagogy, by saying, "I have become long accustomed to a passive English learner and user in the classroom, thereby rarely using English online unless L2 communication is initiated by my interlocutor." Yoon-chul echoed, "I was trained to become a passive learner in the classroom during over 10 years of formal language learning. I gained many English grammar knowledge and vocabularies through memorization, and teachers used a corporal punishment when I didn't achieve good scores on English quizzes. I am still a passive English learner in the classroom and digital settings."

Na-young attributed her hesitation to try out communication in English to having an inadequate opportunity for L2 communication practice outside of the classroom (including IDLE context) through her K-12 years. She stated, "I have never studied and used English outside of the English classroom. Now I can read English books that are related to my major, but I just feel uncomfortable and reluctant to learn and use English in the IDLE context." Na-young also mentioned that learning English was more like studying mathematics—the subject used for gaining high school grades or high marks on the college entrance exam—than communication. Hyun-sung explained how this test-driven English learning approach dampened his communicative English skills and L2 WTC in the IDLE setting:

> It was not practical at all since teachers put a lot of emphasis on English tests...I remember English vocabulary in front of my teacher and on tests, but in the presence of foreigners whether it is in online and office settings, I can hardly utter my ideas in English. So, I have become hesitant about using English in the IDLE context, although I know it gives ample opportunities for practicing English.

Se-young discussed "washback effects" (Choi, 2008) on her IDLE activities, namely, how the national test and curriculum played an adverse role in causing her to become a passive English learner and decrease her WTC in the IDLE environment:

> Language exists for communication. But in Korea it exists to test students. Its purpose is wrong here. I hope we can have many opportunities to use English and make us feel the true need for using English...Under the current national test and curriculum, Korean students can't help but becoming passive. They want teachers to spoon-feed them. Although there are a lot of English programs and online resources, because of their learning style and passive nature, they don't actively use them. It is also very rare that I take the initiative in talking to others in English in the IDLE context.

*Social anxiety.* Social anxiety is defined as having an enormous fear or acute feeling of nervousness or embarrassment in social situations (Leary & Kowalski, 1995). Unlike earlier studies (Sheldon, 2008), which reported that social media such as Facebook could mitigate high social anxiety and create a less anxious atmosphere for social interaction, many Korean students felt anxious about and were unwilling to communicate in IDLE-focused interactions. For example, Ha-rim commented, "I have Facebook but most of my friends are Korean. If I post the message in English, I am afraid they would react negatively to it. They may think I am bragging. That's why I am not willing to write anything in English on Facebook." Da-in echoed, "I feel

nervous when I use English on social media. I feel extremely anxious if I might make any linguistic mistake when other Koreans can read my writing. But I am okay when I communicate with foreigners." Tae-won also stated, "Personally, I want to look perfect. And I am not willing to communicate in English in the social media where people can view and judge my imperfect English."

Several participants attributed this phenomenon to cultural factors, such as fear of losing face in public, as revealed in interviews. For instance, Seon-min commented, "Korean judge people by the appearance. I am very conscious of how other people think of me. It really affects why and how I use English on Facebook." Hyo-jung mentioned, "I think it is because Koreans do not want to lose face and feel embarrassed when making mistake in using English. I am also very conscious of how other people might think of me when making mistakes when writing something in English on social media." Likewise, Jun-hwan stated, "I am not willing to communicate in the IDLE environments for the fear of losing face. Other proficient speakers may ridicule and judge me when I make mistakes."

*Contextual variables*

*Familiarity with interlocutors.* A familiar relationship with one's interlocutor influenced participants' tendency for L2 communication in the IDLE context. Most interviewees mentioned that a close proximity of interaction with their communication partner was found to facilitate more L2 WTC in the IDLE context, in that this approach could decrease their L2 anxiety and make them feel more comfortable delivering a message in English. In particular, a majority of the students with overseas experience had chosen social media such as Facebook or Instagram as a means of maintaining their friendships with friends in other countries. Su-ji said, "I have maintained a relationship with my foreign friends whom I met during the overseas trip via LINE

[one of the most popular messaging apps].” Ji-su also commented, “I use Facebook to connect with my friends back in Chicago. Sometimes, we talk to one another via Facebook video call. I feel comfortable talking to them in English.” Moreover, these students also mentioned that affective and social support from their close foreign interlocutors played a vital role in facilitating their L2 WTC in the IDLE context, as suggested by one of these interviewees (Ji-young):

> I have a very good relationship with my host mother back in Michigan, and I talk to her regularly on Facebook. I send her many text messages. She understands me deeply although I do not perfectly express my ideas in English. Sometimes she suggests me better English expressions and corrects my awkward English usages on Facebook.

Some participants pointed out that they felt comfortable communicating in English with their close Korean friends on social media, as reported by Ja-young: “I often talk to my close Korean friends both in Korean and English on KaKaoTalk (Korea’s popular social media platform).” It seems that having similar affiliations (e.g., majoring in English) and linguistic backgrounds that Ja-young and her best friend shared (e.g., having study abroad experience in the USA during one’s adolescent period) helped build a positive, emotional connection, decreased L2 anxiety, and enhanced L2 WTC.

Interestingly, some participants who had no overseas experience but who made friends with foreign friends in Korea and maintained those friendships, were willing to communicate with them in English in the IDLE context, as Ji-seon reported: “I have a foreign friend, and he is a native English speaking teacher working in a private elementary school. I talk to him via KaKaoTalk whenever I have a question related to English.” Doo-whan also mentioned,

> My English communication skill drastically improved when I had met and started dating with an English teacher from America. Back then I had the American girlfriend, and today I am dating with a different foreign girlfriend. I use various social media such as KaKaoTalk and Facebook to keep our relationship.

*Familiarity with communities.* A familiarity with online communities also had a positive influence on students' tendencies toward using L2 communication in a range of IDLE contexts. Tae-hyung commented, "I played Diablo and Lineage online games, and I often talked with other game players in English during the gameplay." Myeong-bo, who was quite familiar with Facebook, reported, "I use Facebook a lot. I am following CNN, BBC, National Geographic Channel, and Gag channels. I can learn various perspectives toward current issues in English through those contents and other users' replies. I often post comments or replies to interesting topics in English."

Ha-song, who was a member of Quora, one of the world's popular Q&A sites for asking questions and connecting with people, commented:

> I often go to Quora to gain more knowledge where I can ask and answer questions in English. Sometimes I can have an extended conversation with foreigners there. Recently, I argued with some foreigners due to a misused terminology of Korea called *Chosun*. Some foreigners mistakenly used it as *Joseon,* the term that was closely pronounced and derived from Japanese. So I had a long argument in that community to fix it.

Byung-ho, who was an amateur rapper, often produced multiple Korean and English rap songs and took the role of a meaningful contributor to his rap groups in IDLE environments such as SoundCloud and Facebook communities:

> When I uploaded my rap songs to SoundCloud, one German guy contacted me and we became a friend. I had no problem having a conversation with him. He said my English was good. SoundCloud is the social sound platform where anybody, even Eminem, can upload their songs and share them with other musicians online. I make friends there and some of them become my Facebook friends…When I upload my rap songs onto my Facebook and other online rap communities, foreigners who listen to my songs leave comments in English…I have to be a very proactive person here. I need to sell myself as a rapper to others. Otherwise, I may get kicked out of this league. So, I am actively involved in various online rap clubs and communities

*Individual variable*

*L2 self-confidence.* Students with more L2 confidence were more likely to initiate L2 communication in the IDLE context. This phenomenon was especially salient among the overseas group that had lived or studied in an English-speaking country. Ji-soo commented, "After overseas study, I became confident in speaking English with anyone. The more I spoke English, the more confident I became." Hye-in also reported, "After the overseas experience, I become more willing to communicate in English without being too much conscious of others in and outside of the classroom."

Interestingly, some participants without any overseas experience indicated that increased L2 self-confidence was gained through regular interaction with other English users who were living in Korea. This interaction consequently facilitated their L2 WTC in the IDLE context. For example, Ju-wan had a foreign girlfriend who was teaching English in Korea and commented, "I feel more open and bolder when I use English in any situation. I think my frequent communication with my girlfriend on Skype and Facebook helps increase my confidence." Yu-

ri, who made a lot of foreign friends through engaging with them via digital games and virtual communities, commented, “I am not afraid of making a mistake when speaking. I have had a lot of positive experience associated with studying and using English in the virtual settings.”

**Table 19. Four participants’ profiles on demographic, IDLE and English outcome data**

| Name | Ju-no | Jin-young | Su-ja | Byung-ho |
|---|---|---|---|---|
| Nickname | Mr. Fun | Mr. Deliberate | Ms. Leverage | Mr. Street |
| University | KWU | KCU | KCU | KWU |
| Grade | Sophomore | Senior | Sophomore | Freshman |
| Gender | Male | Male | Female | Male |
| Age | 23 | 26 | 21 | 19 |
| LSE | >10 years | >10 years | >10 years | >10 years |
| Major | Humanities | English | English Education | Business |
| Overseas Experience | No | No | No | No |
| Digital devices | 3 | 3 | 3 | 3 |
| IDLE Quantity (hr/day) | 1-2 | <1 | <1 | >2 |
| IDLE Quality | 3 | 18 | 21 | 14 |
| TOEIC | 400 | 935 | 900 | 265 |
| Speaking | 68 | 95 | 100 | 85 |
| PVLT | 22 | 80 | 88 | 16 |
| RVLT | 94 | 100 | 100 | 67 |
| Confidence | 3 | 3 | 3 | 5 |
| Enjoyment | 4 | 4 | 3 | 5 |
| Anxiety | 3 | 5 | 3 | 1 |
| BFI | 0 | 0 | 30 | 53 |
| Benefits of IDLE | 100 | 30 | 70 | 95 |

Note: LSE = Length of Studying English; BFI = Benefits of Formal Instruction

### 4.5 Four individual IDLE cases

The cases of four participants provided qualitative evidence to back up the statistical findings and capture an overview of the breadth and depth of Korean EFL university students’ engagement with IDLE activities. Taken from interview responses, four participants had much in common. For example, they were born and raised in a rural area or small town during early childhood but moved to a city for higher education. As shown in Table 19, they had been learning English for more than ten years without any overseas experience at the time of this

study. They also carried three digital devices and often engaged in a range of IDLE activities. They credited much of their English fluency to IDLE engagement rather than formal instruction. However, their engagement with IDLE activities outside of school took place in qualitatively different manners.

**The Case of Ju-no: Mr. Fun**

Ju-no was a typical Korean EFL student except that he did not attend *Hagwon* or cram schools until junior year of middle school. He attended public school in the K-12 years with a typical class size of 40 or more students, and had no overseas experience. He was the second year undergraduate student with the Humanities major at *KWU* when I interviewed him.

His motivation for learning English was purely extrinsic and instrumental. In his own words (translated from Korean):

> Everybody was doing it, and so I felt pressured to study English. I knew my classmates were good at getting good scores on English because they were from wealthy family and attending *Hagwon*. But I just followed the national curriculum from 3rd grade without receiving any private lesson or tutoring outside a formal school program…I also needed to study English in order to get a job.

Since Ju-no was not a wealthy student, he could not afford private education for his English (e.g., private tutoring, standardized English tests, English camps, and study abroad programs). However, like the other typical Korean EFL students, he was heavily dependent upon formal in-class learning. His heavy reliance on extrinsic and instrumental motivation (e.g., obtaining high scores on formal testing or securing good employment) rather than intrinsic motivation (e.g., enjoying the learning process without expecting external rewards) might have affected his attitude and proficiency in English. He regretted relying too much on formal

education and came to realize the reason why Korean parents and students seldom trust English teachers in public schools, but spend enormous money and time in the private education market (Song, 2014). In his own words (translated from Korean):

> I learned a great deal of English words and grammars from formal instruction. But today I can't remember any English structure and sentence at all. Back then I simply memorized and quoted the English textbooks when speaking or writing in class. I mainly focused on studying English for school assignment and the exams. But I have trouble even with basic conversation.

Ironically, he still believes being good at English is equal to getting a good TOEIC score because his university requires its students to obtain TOEIC or TOEFL scores, and it is important for getting a job after graduation (Choi, 2008; Educational Testing Service, 2004, 2005). In his own words (translated from Korean):

> After two years of military service, I got back to school and attended TOEIC *Hagwon*. To me, studying English is equal to preparing for TOEIC examinations. TOEIC *Hagwon* helps practice and hone my test taking skills. I will need to submit various certifications including TOEIC score in order to prove evidence of my competency and secure my employment.

As for the engagement with IDLE activities, Ju-no carried three digital devices and often played the massive, multiplayer online role-playing game (MMORPG) in his leisure time. Ju-no played a game for a long time, for recreation, and seemed to sustain his motivation by its external rewards (e.g., game items, a word of praise). Although he read descriptions in English to obtain information about rules and instructions for the game, he rarely engaged in chatting with other game players. In his own words (translated from Korean):

> It is fun, and I play the game habitually. It releases my stress. I can get good items when I play it well. It is a good rewarding system. I also feel good when I receive good feedback from other game players for my good play…Although my game buddy gives me feedback, I can hardly do it because my English ability is not good enough.

Intriguingly, although Ju-no felt relatively less anxious about speaking English in non-digital situations (anxiety = 3) compared to other students surveyed (average mean of anxiety = 3.18), he seemed very anxious and reluctant about using English during digital game play. Additionally, it appears that his IDLE quantity (i.e., mid-IDLE group) was not strongly associated with his TOEIC score (i.e., 400). According to his account, Ju-no enjoyed playing the game and learning English (enjoyment = 4) because he felt it was not like studying in a formal setting or a difficult game to play, so features of gamification motivated him to engage in using English during game play (Butler, Someya, & Fukuhara, 2014; Gee, 2007). For further L2 development, however, judging from L2 vocabulary knowledge (i.e., PVLT = 22) and speaking (68) as well as his interview comment "I need to get pushed and controlled by somebody; otherwise, I will only involve a type of IDLE activity that I like, neglecting other areas of IDLE activities," he may need assistance from more knowledgeable L2 users, such as teachers, mentors, or peers (Vygotsky, 1978).

**The Case of Jin-young: Mr. Deliberate**

Jin-young was a typical Korean EFL student, and he had attended English-related *Hagwon* since elementary school. Like Ju-no, Jin-young also attended public school in the K-12 years, and had no overseas experience. He was the fourth year undergraduate student with English major at *KCU* when I interviewed him.

His motivation for learning English was both instrumental and integrative. During early childhood, his father forced him to study English hard in an attempt to make up for his own 'lost dream' (e.g., studying English well). It also suggests that Jin-young's father may consider the academic success of his son as his own success, which is also one of the important items on Korean parents' agenda (Kim & Kim, 2016b). However, English *hagwon* and private after-school study programs enabled him to achieve a high level of communicative skills at a relatively young age. During his university years, he was more inclined toward integrative motivation when it comes to learning English and improving his proficiency. In his own words (translated from Korean):

> My father pushed me to study English hard because he might have wanted to resolve his own feelings of regret that he had not learnt English much. So, I did a lot of study group activities from 2nd grader to 9th grade and, fortunately, acquired English in a very natural way. The instructors used Total Physical Response (TPR) techniques in an effort to improve my speaking fluency…Nowadays I think studying English also allows me to understand English movies and texts better as well as talk with other foreigners.

Like Ju-no's case, however, Jin-young also felt pressured to prepare for and get a good TOEIC score during tertiary education period. He believes that higher TOEIC score is important on his career success because English proficiency scores are often used as a measure for job employment and promotion. He commented, "After graduation, I want to work in a good company. English is a very basic skill. On the job market, TOEIC and TOEIC speaking proficiency certificates are necessary."

Given Korea's social and educational structure (that uses English proficiency scores as a measure for university admission, job employment, and promotion), he seemed to view English

as “linguistic capital” and a means of competition to climb up “the social ladder” (Bourdieu, 1991; Kang, 2009; Seth, 2002; Zeng, 1995). However, he also perceived English as a communication tool and engaged in practicing communicative skills informally. He attributed much of his English speaking fluency to informal language learning. In his own words (translated from Korean):

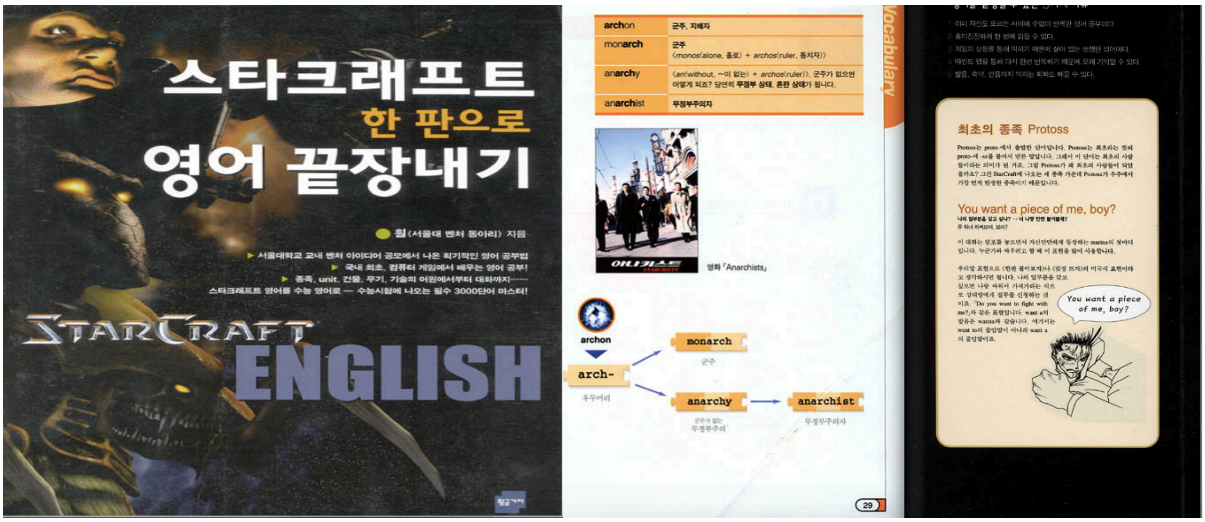
> I joined the English debate club. I had to discuss on various topics in English for five to ten minutes. At first, I couldn’t speak it at all. But I have intentionally attended English conversation classes and engaged with English-related activities outside of classroom in order to get as many opportunities to speak English as possible.

When it comes to involving IDLE activities, like Ju-no, Jin-young carried three digital devices and often played MMORPG in his leisure time. However, the crucial difference was that he engaged with MMORPG in qualitatively different ways. For example, Jin-young played StarCraft MMORPG in much different ways. Although Jin-young became exposed to abundant English input, as had Ju-no, he enjoyed communicating with other players during the game. Although his anxiety in a non-digital environment was high (5), according to the interview he was not anxious about using English online but felt at ease. He commented, “I can look up words and idioms on the Internet while playing the game,” which might have helped him overcome his L2 anxiety in non-digital contexts. Outside of game play, he purchased a “StarCraft English” book to study English vocabularies and idioms that he had encountered aurally and visually during game play. Written by a group of Korean university students, who were also big fans of the StarCraft game, this book helped him acquire not only hundreds of authentic, technical English vocabularies (e.g., hand-to-hand fighting, combat physician, barrack) but also colloquial English expressions (e.g., ‘You want a piece of me, boy?’), as illustrated in Figure 3. He

mentioned that these additional types of learning helped sustain his interest in learning English through the game and improve his English knowledge. In his own words (translated from Korean):

> I play online game 'StarCraft 2' with American game players in English. While playing online game, I casually talk to them about the game and strategies in English…I bought a book "StarCraft English" to study StarCraft English. In a game, Marine says "You wanna piece of me?" This book explains its meaning. A tribe 'Terran' also appears on the game. This book explains the root of this vocabulary. For example, 'terra' originally means "soil." It explains other relevant words such as "territory" and "Mediterranean" that were derived from its root meaning. I remember a lot of such vocabularies, and I have a lot of fun doing it."

**Figure 3. A front cover and one of the contents of "StarCraft English" book**




Unlike Ju-no's case, online game provided Jin-young the affinity space "where people affiliate with others based primarily on shared activities, interests, and goals, not shared race, class culture, ethnicity, or gender" (Gee, 2004, p. 67; also see Gee, 2005; Scholz, 2017). Since he needed to play the game collaboratively, he tried his best to improve two important skills—

English communication and game play strategy—to become a good team player. When he did not play the game, he reflected upon the game experience and learned game-related English expressions, as well as various game-play strategies, so he could apply them to the next game play session. According to his account, he "craved" for more English because he would want to share more knowledge and participate more actively in the game. Hence, he spent additional time in StarCraft blogs and YouTube sites, where StarCraft fans shared information in English.

Another striking difference was engagement with IDLE-quality activities. As indicated in Table 19, Jin-young engaged in 18 different IDLE quality activities, including playing the "Pokemon Monsters" game, watching the "Saturday Night Live" TV show, watching the "Conan O'Brien Show", and listening to pop songs in English. He took advantage of such multimodal resources, which could contribute to many of his 18 different IDLE quality activities. Overall, it appears that all these processes allowed him to acquire everyday, high frequency English language skills, but also formal vocabulary, which led him to learn more advanced vocabularies and facilitate his overall knowledge constructions in English (Sundqvist & Wikström, 2015).

**The Case of Su-ja: Ms. Leverage**

Su-ja was born and raised in a village located in Gwangwon province in east-central South Korea that was remote from any major city. She had no overseas experience and first started learning English at age 10 as a 3rd grader in the public-school system. Neither her mother, who was a hairdresser, nor her father, who was an office worker, spoke any English. Unlike typical Korean students in more urban areas, she had never attended an English *hagwon*, or private after-school study program. At the time of this study, she was a second-year English major at *KCU*. Her GPA was 2.5 (out of 4.5), but her English proficiency, as measured by her TOEIC score and other assessments, was remarkable: TOEIC, 900 (out of 990); Speaking, 100

(out of 100); PVLT, 88 (out of 100); RVLT, 100 (out of 100). In her interview, she attributed 30 percent of her English speaking to formal learning and 70 percent to IDLE. Su-ja reported engaging in 21 different types of IDLE activities over the previous six months (versus an average of 9 types among all participants). She was also able to elaborate in great detail how she had learned English from early childhood to higher education through IDLE activities.

During early childhood, Su-ja said she was a frequent, enthusiastic online player of *World of Warcraft* (English version) and received massive exposure to oral and written English through her play online, stating, "I had to read many instructions in English while playing the game." She also watched many animation movies and dramas in English, which helped her pick up a large of portion of English phonology and a great deal of vocabulary, including colloquial expressions, incidentally and seemingly without effort.

Through her primary school years, she amassed many hours of engagement in IDLE using other digital resources (e.g., her smart phone), which helped her acquire still more vocabulary and idiomatic expressions. She reported that she did not set aside time for studying English formally in those early years; however, around the time she graduated from the 9$^{th}$ grade, she began to feel a strong need to study English "seriously," in preparation for the college entrance exam. During the three-month winter vacation (transition period from 9$^{th}$ to 10$^{th}$ grade), and in contrast to the typical pattern reported by other interviewees, she began intensive self-directed study of English. Through form- and meaning-focused study, she acquired many English words and complicated sentence structures, which helped increase her interest in learning more advanced English. In her own words (translated from Korean):

> Schools aren't built for my learning. I graduated from middle school in the bottom 10 % of all students. I was ranked around 290 out of 320. I had no interest in learning English,

> either. But when I was studying English during that winter vacation, I encountered many words I had heard in on online games, such as 'blizzard' again and again in several English textbooks and I could figure out their meanings by myself, which was really intriguing to me…I began to memorize more challenging words like 'iconoclasm.' The weirder and harder the vocabulary, the more I got excited. Eventually, all of those inputs [from online games] became a solid foundation for my English.

When Su-ja entered 10th grade, she started practicing English speaking with foreigners via Skype:

> During 10th grade, I practiced speaking English through Skype. I talked to a Filipino English teacher for a year, and I found speaking English very interesting. There was no corrective feedback, and we just kept talking. I just did it as if I had gone on a picnic with my close friends.

With more availability of digital tools and more flexible study hours, as a university student Su-ja created her own private English environment, "invisible university" (Dressman et al., 2016). For instance, she chose to live in an on-campus international dormitory, sharing a room and lounge with international students. She found herself constantly chatting with them on social media, and this provided an immersion in English that was virtually total:

> My roommate is from the Republic of Azerbaijan. They use British English… With my roommate and other dorm friends, I play a board game called 'Blue Marble' in English at the lounge. They are Spanish, German, and Mexican… I often talk to my friends in English in the dorm and via KaKaoTalk.

She also constantly exposed herself to English via various digital sources:

I check emails; half are in English and half are Korean. English emails are mostly about shopping items and news articles from BBC and CNN…I watch game channels in English on YouTube. I watch the game "Purify," a free online game. I also watch "Smosh," an American comedy, and "The Conan O'Brien Show."

**The Case of Byung-ho: Mr. Street**

Byung-ho was not only one of the most successful IDLE learners but also had the idiosyncratic IDLE experiences as a Korean EFL learner. As shown in Table 17, he rated his enjoyment of learning English a '5 (very strong),' his confidence level a '5 (very strong),' and his anxiety level a '1 (very weak).' He also commented, "I feel comfortable using English, and I do not have any fear of speaking English." He attributed 95 percent of his English to IDLE and 53 percent to formal instruction, and engaged in 14 different IDLE activities.

But it seems that his IDLE quality was not strongly associated with his proficiency scores. Particularly, he did not yield good English scores from formal programs and standardized testing: TOEIC, 265; PVLT, 16; RVLT, 67. In his interview, Byung-ho commented, "I hated school-based tests and standardized tests. I was under a lot of stress when I was evaluated by my English test scores, and was compared to other students using the test scores. It decreased my interest of learning English formally."

In fact, his motivation for learning English was different from the other Korean students. He started and sustained learning English because of his passion for rap music. In his own words (translated from Korean):

During my 6$^{th}$ grade year, I listened to Dok2 [one of the Korea's famous rappers] for the first time. I liked his songs, and they contained a lot of English slangs. I intentionally listened to and studied the lyrics of his songs. It helped me enjoy learning English. I also

became one of the best rappers in the middle school…Even today I sing rap songs everyday. It is my habit...Sometimes, I sing rap and hip-hop songs in English. If I do it in English, it sounds really cool like African American rap songs. That's why I am studying English. During singing I'm particularly interested in using reduced forms, idioms or metaphors in American English that are not often used in formal conversations or writing.

Instead, he was a fluent and capable English speaker, as indicated in his speaking score (85). He also attributed a large part of his fluency to listening to various English rap songs and trying to mimic their accents. In his own words (translated from Korean):

I really enjoy listening to English rap songs. After I get up and take a shower in the morning, I listen to easy rap songs, the ones that I can easily follow and understand. But I listen to fast-paced rap songs on my way to school, do them again on my way back home, and analyze the lyrics of those songs before going to bed. I listen to the songs for at least three hours everyday on average. I analyze and interpret the lyrics for 5 to 10 minutes every night.

Recently, he has started writing his own rap songs. In his interview, he said he would want to become a famous rapper in Korea just like his role model, Dok2:

So far, I have performed live rap shows ten times. My dream is to become a rapper. I belong to several rap crews…Recently I have become the number one rapper in the local rap competition. Next year, I want to participate in the "Show Me The Money" [a South Korean rap competition TV Show]…Currently, I am making a mixtape to promote my songs. I confidently write my lyrics in English. But I know little about English grammar, so I often ask others to check my grammar…My role model is Dok2. His song "On my way" is about his difficult early childhood, spending a long time in obscurity as a rapper

and overcoming his hardship and difficulties in life. I like this type of song and want to create the song like this and become an inspiration to others.

His goal for making rap songs and becoming a rap star has motivated him to learn and use English informally and autonomously:

> I read a poetry and detective novel such as Sherlock Holmes. I read Sherlock Holmes about half a page everyday. By reading English novels, I can pick up a useful phrase such as "credit is better than gold," which I can insert into my song…Art is not made out of school. Eminem and Picasso were not made out of school. I think creativity and creative ideas come from my own endeavor. I have my own way.

Creating rap songs has also given him opportunities for intercultural communication on social media such as SoundCloud and Facebook:

> When I uploaded my rap songs to SoundCloud, one German guy contacted me and we became a friend. I had no problem having a conversation with him. He said my English was good. SoundCloud is the social sound platform where anybody, even Eminem, can upload their songs and share them with other musicians online. I make friends there and some of them become my Facebook friends. It has helped improve my English listening and speaking skills…Also, when I upload my rap songs onto my Facebook and other online rap communities, foreigners who listen to my songs leave comments in English…I have to be a very proactive person here. I need to sell myself as a rapper to others. Otherwise, I may get kicked out of this league. So, I am actively involved in various online rap clubs and communities.

Byung-ho took advantage of an English rap song as a means of transforming his identity as 'an lower-intermediate English learner' in the EFL classroom into 'a professional rapper'

within his virtual rap community. He produced multiple Korean and English rap songs and took the role of a meaningful contributor to his rap groups in IDLE environments such as SoundCloud and Facebook communities, which also helped him improve his English oral proficiency, as indicated in his English speaking score of 85 out of 100. Byung-ho's case may indicate that the more learners' engage in L2 WTC in the IDLE context, the more they are likely to become involved in authentic, meaning-focused IDLE activities such as speaking and writing–activities that also are associated with good English outcomes.

Summing up, these four case studies have shown that young Korean EFL students today increasingly practice informal learning with technology devices in diverse non-school settings. Except Ju-no, three participants seemed to positively perceive digital technology as potential learning tools and resources to promote social interaction with their friends and other English users in a virtual space, which is similar to cases of Malaysian university EFL learners who used digital devices for informal English learning (Ibrahim et al., 2014). They utilized the merits of multimodality, which helped them improve their understanding and delivery of their messages through several types of sensory integration (e.g., sound, visual, and video) (Dressman, 2016a; Van Leeuwen, 2015). It also suggests that MMORPGs or social media is conducive to improving L2 learning outcomes, but it may not always warrant the English outcomes depending on students' motivation and learner autonomy (Ranalli, 2008; DeHaan et al., 2010; Sylvén & Sundqvist, 2012).

Low proficiency EFL students like Ju-no whose sense of learner autonomy is low may need external assistance from teachers, mentors, or peers in order to bear fruit in learning English (Vygotsky, 1978). Following Raya's (2006) recommendation, teachers and mentors can integrate journal writing into lesson plans or extracurricular activities in the following order so as to foster

self-regulated EFL learners who could set goals, adopt appropriate learning strategies, and constantly monitor/evaluate their learning process in IDLE environments (pp. 134-135):

> 1) What they know and what they do not know (e.g., self-assessment about their learning), 2) their learning experience (e.g., noticing students' learning difficulties), 3) their planning and self-regulation of learning activities (e.g., understanding the degree of autonomous responsibility for learning, and 4) debriefing the learning process (e.g., raising the awareness of their learning process).

# CHAPTER 5

# DISCUSSION AND CONCLUSIONS

## 5.1 Discussion of the Findings

By using a mixed-methods analysis, the present study offers empirical evidence that provides a better understanding of IDLE activities among Korean EFL university students. The study not only investigated both quantity and quality of IDLE activities in relation to English learning outcomes, but also attempted to examine variables that would predict the quantity and quality of IDLE activities and identify factors that may affect L2 learners' willingness to communicate (WTC) when engaging in IDLE activities.

### Quantity/Quality of IDLE and English Vocabulary Measures

This research question explored Korean university EFL learners' IDLE, examining whether there was any relationship between quantity and quality of IDLE activities and their English vocabulary outcomes. A key finding was that, in contrast to earlier findings (Olsson, 2011; Sundqvist, 2009; Sundqvist & Sylvén, 2014; Sundqvist, & Wikström, 2015; Sylvén & Sundqvist, 2012), frequent engagement in IDLE (quantity) was not closely associated with two indicators of English vocabulary tests. This suggests that the raw amount of time students spend on IDLE activities may not contribute much to their L2 vocabulary acquisition. To put it differently, when students acquire L2 vocabulary through IDLE activities (e.g., playing digital games in English or using social media in English), the primary source for the L2 vocabulary gain is not necessarily the quantity of IDLE activities. This challenges previous findings, which addressed the importance of the total amount of time engaged in IDLE experiences for L2 vocabulary acquisition. In the instructional context, therefore, it is of paramount importance for L2 teachers to realize that simply placing language learners in an IDLE-rich environment may

not automatically guarantee their successful L2 vocabulary acquisition.

Another significant finding was that the quality (diversity) of IDLE activities that combined form- and meaning-focused language learning was essential for achieving L2 learners' vocabulary acquisition. The linear associations between the diversity of IDLE and L2 vocabulary outcomes provide additional evidence for this result. This finding corroborates previous studies, which found that the diversity of form- and meaning-focused activity outside of the language classroom was a consistent predictor for L2 students' levels of confidence, enjoyment and speaking proficiency (Lai et al., 2015). Additionally, this study offers new insights into how students' engagement with the quality of IDLE serves as a significant predictor of their levels of vocabulary knowledge—a predictive power of regression models that was not evaluated in earlier works (Sundqvist & Sylvén, 2014; Sundqvist, & Wikström, 2015; Sylvén & Sundqvist, 2012). On these grounds, it seems plausible to suggest that students who engage more in the quality of IDLE activities may perform better with regard to L2 vocabulary acquisition.

**Quantity/Quality of IDLE and Affective Variables, Standard English Test, and Productive Language Outcomes**

This research question aimed to investigate both quantity and quality of IDLE activities that are associated with six indicators of the English learning outcomes. A significant finding was that the quantity of IDLE was positively associated with affective domains (i.e., enjoyment, confidence, and anxiety) and standardized tests (i.e., the TOEIC), but not with speaking and PVLT. This finding is not consistent with previous research conclusions (Jensen, 2017; Olsson, 2011; Sundqvist & Sylvén, 2014; Sundqvist & Wikström, 2015; Sylvén & Sundqvist, 2012), which reported on the correlation between IDLE quantity (e.g., gaming play) and English learning outcomes (e.g., PVLT). As regards a positive relationship with TOEIC, the participants

have been educated in a Korean educational context that places greater emphasis on high-stake English tests, such as the college entrance exam and the TOEIC. Thus, the present finding, with respect to such associations with TOEIC scores, was meaningful but not with regard to productive language outcomes, such as vocabulary and speaking (Choi, 2008). These findings imply that the IDLE quantity may produce different learning outcomes depending on students' learning contexts (i.e., Korean EFL context and Nordic EFL contexts), which would merit further investigation in the future.

In addition, the reason why there was a positive relationship with affective variables, but no such relationship with productive language outcomes, might have been due to a lack of learner autonomy on the part of students. As suggested by Ju-no's comments, he hardly took responsibility for his own IDLE learning from both individual and social perspectives (Benson, 2007; Holec ([1979] 1981). Rather, he spent a significant amount of time merely doing IDLE activities that were easy and entertaining, overlooking other areas of English (mainly EFI activities) and investing far less on IDLE quality activities. These findings imply that IDLE quantity may help Korean EFL learners emotionally—for example, enjoy learning English more, become less anxious about speaking English, and feel more confident in using English, but may not yield viable L2 English proficiency (Butler et al., 2014). As Ju-no commented, they may need external assistance from teachers, mentors, or peers in order to bear fruit in learning English (Vygotsky, 1978).

**Predicted Influence of English Outcomes on IDLE Quality/Quantity**

This research question attempted to explore which variables of the English learning outcomes would predict the quantity and quality of IDLE activities. From the regression model, enjoyment and anxiety were only significant predictors for IDLE quantity. The case of Ju-no also

supports this finding—namely, that although his enjoyment of learning English may be conducive to his engagement in IDLE quantity (mainly digital games), it did not lead to an enhancement of any measures of his L2 English proficiency. This is consistent with previous studies that have reported on the affective benefits of digital games (e.g., Butler et al., 2014; Thorne et al., 2009; Reinders & Wattana, 2014, 2015). On these grounds, the present findings may suggest that students who enjoy learning English and feel less anxious about communicating in English are more likely to spend time involved in IDLE activities.

Another key finding was that IDLE quality significantly correlated with all indicators of English outcomes. This result corroborates Lai et al.'s (2015) study, in which the quality of EFL learners' out-of-class learning had a positive relationship with affective learning (i.e., enjoyment and learning efficacy) and English grades. However, this study offers new insights into how the quality of IDLE activities engaged in by Korean EFL learners without any overseas experience can be beneficial to other affective domains (e.g., confidence and anxiety), productive language outcomes (e.g., speaking and PVLT) and standardized English tests (e.g., TOEIC). This result is also supported by Jin-young's involvement in 18 different types of IDLE activities associated with speaking (95), PVLT (80), and TOEIC (935) but relatively less with affective domains such as confidence (3) and anxiety (5). More specifically, Jin-young not only interacted actively with other game participants but also extended his English learning beyond game play into varied types of IDLE activities. Thus, such a high degree of his learner autonomy created more English learning opportunities, which consolidated his English vocabulary knowledge and communicative skills (Palfreyman, 2011; Thorne et al., 2009; Richards, 2015). In light of Hulstijn and Laufer's (2001) *Involvement Load Hypothesis,* Jin-young's intensive involvement in a range of different IDLE activities (e.g., playing games, reading books, watching videos on

YouTube, etc.) on a same topic (e.g., the StarCraft game) facilitated a need and search for, and evaluation of the meaning of new English words and expressions. This process may have led to increased vocabulary learning and better overall English learning outcomes. Based on these results, it seems plausible that EFL students who have not studied or traveled abroad but developed or implemented a balance in both form- and meaning-focused IDLE activities could enhance their overall English learning outcomes.

The multiple linear regression analysis revealed that PLVT, speaking, and anxiety were significant predictors for IDLE quality. This result indicates that students who have a high level of communicative skills but low L2 anxiety levels tend to engage more in IDLE quality activities. Qualitative data also reveals that Jin-young, who had no international experience, put himself in an "invisible university of rich and authentic multimodal resources" (Dressman et al., 2016), facilitated his L2 learning with the help of interlocutors (e.g., game partners and game fans) without formal assistance from teachers, which concurred with previous studies (Lee, 2017; Thorne et al., 2009). This study also adds a new finding to the current literature, which was reported by Lai et al.'s (2015), that parents and teachers are significant predictors of students' quality of out-of-class English learning experiences.

**Factors that affect learners' WTC when engaging in IDLE activities**

This final research question explored possible variables that may influence L2 learners' WTC when involving IDLE activities. In that regard, three major factors (sociopolitical, contextual, and individual variables) were identified.

In the interviews conducted with students, the most frequently mentioned responses included sociopolitical variables such as L2 communication practice and social anxiety. Students explained how national policy affected the national test, the test-oriented curriculum and teacher-

centered instruction, respectively. In other words, Korea's social and educational structure might have led to a lowering of students' amount of L2 communication in the classroom and IDLE context, as students have been accustomed to avoiding or minimizing L2 communication. The negative washback effects of a high-stakes exam and such social pressure supported this result (Choi, 2008). For instance, washback effects push Korean EFL teachers and students to become too much focused on exam-oriented English lessons (e.g., form-focused activities) instead of fostering communication skills. Additionally, under the current social system and atmosphere in which English proficiency scores (e.g., TOEIC) are used as a measure for university admission, employment, and promotion, a majority of Korean students tend to perceive English as "linguistic capital" and therefore a means by which to climb the "social ladder" (Bourdieu, 1991; Seth, 2002). In this way they consider English as one of the most important academic subject matters, more akin to math or science rather than as a communication tool (Kim & Y. –K. Kim, 2016). Therefore, this macro-level, sociopolitical factor may have resulted in a negative impact on students' WTC in the IDLE context.

Previous studies have suggested that social media such as Facebook could mitigate high social anxiety[1] and thereby create a less anxious atmosphere in which social interaction could occur (McCord, Rodebaugh, & Levinson, 2014; Sheldon, 2008). If this concept is applied to the present study, Korean EFL students who experience high social anxiety in face-to-face social interactions (e.g., L2 communication in the classroom) may use social media (e.g., Facebook) to balance out their levels of social anxiety and thereby become more active L2 users in the IDLE context. Intriguingly, however, many students who took part in this study tended to feel anxious and become hesitant to use English in IDLE interactions, especially with peer Korean interlocutors. The existing literature attributes this phenomenon observed among Asian EFL

students to cultural factors, such as the Confucian culture and fear of losing face in public (Hsu, 2015; Zhong, 2013). However, I argue that this cultural interpretation is a "convenient explanation" (Bao, 2014, p. 6), so it seems more plausible in my study to interpret this phenomenon from Korea's social and educational structure. For example, Korean EFL learners tend to aspire to score higher on English tests than their peers, a phenomenon conceptualized as *competitive motivation* (Kim, 2010, p. 215). Competitive motivation, which is somewhat similar to extrinsic and instrumental motivation (e.g., learning English primarily for academic or employment purposes), has consistently demonstrated a significant positive correlation regarding English achievement scores among Korean high school students, which indicates that Korean EFL learners concentrate too much on competition with their classmates when learning English (Kim & Y. M. Kim, 2016). This study suggests that this attitude is also identified as one of the most influential factors for students' WTC in the IDLE context. Put differently, when engaging in IDLE activities, Korean EFL students tend to have high L2 anxiety and are reluctant to initiate L2 interaction in the presence of other superior English interlocutors of Korean, regardless of their L2 proficiency.

The study also found that a familiar relationship with interlocutor(s) and communities influenced students' L2 WTC in the IDLE context. In particular, a close proximity of students' interlocutors (e.g., intimate domestic/foreign friends) was found to play a facilitative role on L2 WTC. This result supports two previous studies: Lai and Gu's (2011) finding that students who feel uncomfortable with interlocutors (e.g., strangers) in an out-of-class CALL context tend to hesitate in carrying out L2 communication; and Cao and Philip's (2006) study in which the familiarity with the interlocutor contributed to or reduced L2 WTC. Interestingly, the level of familiarity with online communities also had a positive influence on subjects' tendency to

produce L2 communication throughout a range of synchronous and asynchronous IDLE contexts, such as online games, social media, Q&A sites, and rap communities. Previous studies reported that L2 learners engaged in various informal online English learning communities such as fandom and fan practices (Sauro, 2017), social networking sites (Sockett & Toffoli, 2012), and a GRE writing discussion forum (Sun, Franklin, & Gao, 2017). But this study offers new insights into how familiarity with virtual communities can be beneficial for enhancing L2 WTC and using English in a more positive frame of mind which supports the *individual* dimension of learner autonomy (Blin, 2004; Holec's ([1979] 1981) and its *social* dimension (Benson, 2011b). That is, based on students' own needs and interests, they are responsible for IDLE activities while interacting with other community members (or other English users) in a digital affinity space[2]. Both components of learner autonomy appear to enhance students' internal motivation for L2 WTC and, ultimately, lead to greater L2 use in the IDLE context. Considering that Korean students tend to have limited learner autonomy and intrinsic motivation within Korea's formal educational program, it is noteworthy that this finding may offer valuable insights into how to overcome Korea's unique sociopolitical environment and, more specifically, relieve Korean EFL learners' high level of social anxiety in this context.

Congruent with previous studies (e.g., Yashima, 2002), this study also found that students who felt confident about using English were more likely to initiate L2 communication in the IDLE context. Although this phenomenon seem more salient among students with study abroad experience (Kang, 2014), several participants without any international experience also demonstrate that L2 self-confidence can be greatly enhanced as a result of regular interactions with their close foreign friends, online and offline. What is intriguing here is that, parallel to my earlier observation, depending on the presence of and familiarity with interlocutors, the degree of

how much Korean students are willing to engage in L2 communication in the IDLE settings seems to be predetermined, regardless of their L2 confidence/proficiency level. In other words, although Korean EFL students perceive themselves as competent in using English, they may feel anxious about using English in the presence of more proficient English interlocutors who are Korean. This finding adds support to MacIntyre et al.'s (1998) model that Layer 5 (affective-cognitive context) and Layer 4 (motivational propensities) are closely interrelated with Layer 3 (situated antecedents).

Based on the findings of the current study, a new model of L2 WTC in the IDLE context from a dynamic perspective emerged. The model is proposed in light of the interrelated effects of sociopolitical, contextual, and individual variables. It can be both an extension and modification of MacIntyre et al.'s (1998) WTC model. It is extended in that the five variables (including *situation-specific* and the *trait-like* variables) identified in this study interplayed simultaneously during L2 communication in the IDLE context and thereby supported MacIntyre et al.'s theoretical perspectives. It was modified because sociopolitical, contextual and individual variables seem to be equally interconnected with one another, and the relationship can be explained better through the proposed *dynamic* model rather than MacIntyre et al.'s *heuristic* model in the pyramid shape.

**5.2 Implications for EFL Students, K-12, and university education**

These findings have important implications for EFL learners, K-12 and university education. For EFL learners who have the disadvantage of living in a monolingual, ethnocentric society, such as Korean EFL students, IDLE activities can be one of the more effective ways to overcome their unfavorable learning conditions (e.g., limited opportunities to learn and use English) and improve their L2 outcomes. As a first step for IDLE activities, students can take

advantage of already existing digital technologies (e.g., satellite television, movies, high-speed Internet, smartphones, a 3-D virtual environment, social media, etc.). However, it is important to note that, as discussed in this study, not every engagement with technology outside the classroom has an equal impact. In this regard, L2 teachers play a significant role in influencing students' use of technology outside the classroom. Informed by the current study and other research (Lai, 2013), it is important for teachers to understand how diversity, in terms of language learning activities, could serve as a key for the quality of students' IDLE experiences. Specifically, three types of teachers' instructional behaviors – namely, affective support (e.g., encouraging them to use technology outside the language classroom), capacity support (e.g., providing students with resources, tips, and meta-cognitive advice in using technology and selecting technology effectively outside the language classroom), and behavior support (e.g., engaging with students by using technology-enhanced activities inside the classroom or assigning them to employ technology-enhanced or technology-mediated activity assignments outside of class) – could affect students' engagement with the quality of IDLE (ibid). Creating an instructional design based on students' individual learning needs and styles would also enhance their motivation to take part in IDLE activities (Sun et al., 2017).

In respect to implications for K-12 education, secondary teachers should understand that simply putting language learners in an IDLE-rich environment may not automatically guarantee successful L2 vocabulary development. Rather, they should consider implementing IDLE-integrated pedagogy (e.g., balancing both form- and meaning-focused language learning) in their educational contexts, which is essential for achieving successful L2 acquisition. Additionally, the reasons why there is a positive relationship between quantity of IDLE and affective domains and standardized English tests but not with productive language outcomes is probably due to the

particularity of participants' educational contexts and lack of learner autonomy. Therefore, more support from stakeholders (e.g., institutions, teachers, and parents)—to provide them with resources and appropriate training to discover the educational benefits of engaging in IDLE activities might be necessary. This support could also develop a new complementary pedagogical model.

As regard implications for university education, this study suggests that the affordance for L2 WTC in the IDLE context could be expanded with the aid of instructional support by, for example, minimizing sociopolitical and contextual variables but maximizing an individual variable. Therefore, it is of paramount importance for language instructors to become more aware of these variables and ensure that when designing IDLE activities – for instance, as part of extramural English activities – sociopolitical, contextual, and individual factors may be closely linked with students' L2 WTC and communication when engaging in IDLE activities. When students use technologies to learn or use L2 outside the classroom, it is recommended that teachers discuss possible effects of social anxiety and interlocutors on students' L2 communication by employing orientation sessions and providing ample opportunities to build rapport and decrease L2 anxiety with partners prior to the implementation of IDLE activities. In the author's previous anecdotal experiences in ELT, teachers, in collaboration with school administrators, could help assign students to international students on campus or in the local community for carrying out a project together. Once they develop a personal relationship by, for example, having a meal or going on a trip together, they could continue their conversations informally through online settings, which may foster the development of a long-lasting relationship. As indicated in the data, this pair or group interaction involving diverse users of English could contribute in a positive way to facilitating more L2 WTC in IDLE, thereby

possibly increasing their overall English confidence and other specific aspects of English competence. With instructional support, this may raise students' affective engagement in IDLE activities beyond conventional instruction and maximize their L2 learning, whose effects may not become diluted over time.

Now, I will make six specific suggestions that can effect instructional change for English education in Korea (e.g., integrating technology into language learning in and outside of the classroom) based on what I have learned through this research as well as my own educational experience in English education (e.g., a B.A. in English education; an M.A. in TESOL; four years as a secondary teacher of English in Korea). First, I would suggest that English teachers use more meaning-focused activities by using technology such as Task-Based Language Teaching (TBLT) (Ellis, 2003; Nunan, 2004) and Communicative Language Teaching (CLT) (Littlewood, 1981) in and outside the classroom. Lai et al. (2015) have indicated that a variety of such language activities using technology can improve students' communicative competence and confidence. Dressman et al (2016) also have discussed how technology can create a multimodal, authentic, and highly engaging language learning environment in comparison to traditional, grammar-focused language instruction. TBLT or CLT activities empower students to integrate four skills in and outside of the classroom. Thus, this communicative, multimodal approach could help English teachers in Korea to better integrate certain kinds of technology use outside the classroom into lesson plans or homework assignments, which can complement in-class learning (e.g., involving more meaning-focused activities), enrich students' language learning experience, and contribute to curricular and pedagogical innovations.

Second, I would recommend that English teachers take advantage of our already existing digital technologies (e.g., satellite television, high-speed Internet, smartphones, etc.) when

conducting meaning-focused activities. Teachers can utilize these rich technological resources as a way of overcoming limitations of in-class language learning while improving English competence in an EFL context (Benson & Reinders, 2011; Dressman et al., 2016; Lee & Kim, 2014; Nunan & Richards, 2014; Richards, 2015). Lee and Kim (2014) have pointed out that Korean students use technology in everyday life, but such use is limited and superficial in terms of its use with respect to learning language, which also concurs with the current study. Thus, Lai et al. (2015) have stressed the importance of the teacher's role in integrating technology-mediated, diverse language learning activities into their lesson plans, which can maximize English input through different modalities of English (e.g., audio, video, images, etc.), enrich English learning outside of the classroom and positively affect students' cognitive and affective aspects. As Dooly (2009) has suggested, English teachers should incorporate into language teaching and learning new technologies and social media available in everyday life. They can also integrate mobile devices (Stockwell, 2010), Short Message Service (Cavus & Ibrahim, 2009; Hayati, Jalilifar, & Mashhadi, 2013; Lu, 2008), and social media (Sockett &Toffoli, 2012) into L2 vocabulary learning and extramural language learning.

Third, English teachers can recommend to students tips or strategies that pertain to successful foreign language learners. For example, despite unfavorable language teaching and learning condition (e.g., more than 100 students per class, no textbooks, inconsistent assessment, inadequate professional development, or little use of technology), young Moroccan students have proven to be proficient language speakers because they have excellent language learning strategies (Dressman, 2016b; Dressman et al., 2016). They have used a range of digital technologies such as satellite television, the Internet, online games, online dictionaries, social media and movies to acquire English oral fluency outside the classroom while learning the

lexicon of idioms, vocabulary and grammar from in-class programmatic instruction. In order to teach more effectively, teachers must demonstrate how to integrate technology into language learning in and outside of the classroom. Dressman et al. (2016) has recommended flipping the curriculum by creating a Facebook page (or highly multimodal websites) for English learning activities through which EFL learners can engage in a great deal of 'comprehensible input' (Krashen, 1981), 'comprehensible output' (Swain & Lapkin, 1995), and 'interaction' (Long & Robinson, 1998). As a result, Korean EFL learners can adopt such English language strategies that the successful foreign language learners such as Moroccan EFL students employ (O'Malley & Chamomt, 1990; Oxford, 1990).

Fourth, teachers can conduct a needs analysis to provide 'custom-tailored activities' for Korean EFL learners. Lai (2013) has pointed out that language learners have quantitatively used technology for language learning outside the classroom. But there are great differences among foreign language learners in terms of type and the nature of technology use for language learning, which is also uncovered in the present study. So, in order to maximize the language learning experience, language teachers should first investigate what students do with technology and how they use it for language learning (e.g., learning vocabulary, listening to songs, reading, connecting with other users of English, watching movies). Based on the students' different needs and interests, teachers can differentiate language learning in and outside of the classroom.

Last but not least, language teachers should encourage Korean EFL learners to take ownership of English. Several scholars in applied linguistics and TESOL have argued that every English speaker, whether they are native or non-native English speakers, can take ownership of English due to currently diverse uses and users of English worldwide: a) more than 80% of communication in English takes place between non-native speakers (Crystal, 2010), b)

approximately 80% of English teachers worldwide are estimated to be non-native, English-speaking teachers (Canagarajah, 2005), and c) all English users now can take ownership of English, making boundary lines between 'native' and 'non-native' speakers much less significant (Graddol, 2006; Widdowson, 1994). As Widdowson (2003) has written, "The very fact that English is an international language means that no nation can have custody over it" (p. 42). This statement indicates that native speakers should not claim that their English is Standard English and therefore superior to the other varieties of English. This sociolinguistic view of English use has been demonstrated in Morocco, where Moroccan students have taken on ownership of their Moroccan-influenced English (Dressman, 2016b). In other words, Moroccan students believe that English no longer belongs to any particular country, and therefore they are confident in using their own approach to English, regardless of their unique accent or usage. On the other hand, a majority of Korean EFL learners still believe that English belongs solely to the United States, Canada, Australia, New Zealand or the United Kingdom, so they are not confident about their own use of English (Ahn, 2015). To the author's knowledge, there is no study that has investigated the correlation between ownership of one's English and one's English ability. However, anecdotal evidence, as well as related studies (see Ahn, 2015; Dressman, 2016b), seems to support the notion that English teachers in Korea should help their students feel proud of their own English (accent) as a way to improve their English confidence as well as competence. This approach is also aligned with 'critically oriented scholarship,' such as Global Englishes (GE), English as a Global Language (EGL), English as an international language (EIL) and English as a lingua franca (ELF), which have also attempted to reconceptualize the traditional approach to ELT and, by extension, raise pedagogical implications for incorporating an EIL (or the other 'critically oriented') perspective into ELT (Matsuda, 2017; Selvi, 2017).

Hence I suggest that the use of technology in language learning can significantly help Korean EFL students gain self-confidence, as identified by students Jin-young, to use their L1-influenced *Englishes* (e.g., Korean English), positively improve their perceptions toward different varieties of *Englishes,* and thus enhance their English proficiency through the following technology-mediated activities: Videoconferencing between EFL students and English users from all *Three Circle* countries (Kachru, 1985), non-native to non-native speakers (NNS-NNS) online intercultural exchange activities (Ke & Cahyani, 2014), NNS-NNS online discussion forums (Ke & Suzuki, 2011), and NNS-NNS online communication via email (Fedderholdt, 2001).

**5.3 Implications for Teacher Educators and Policymakers**

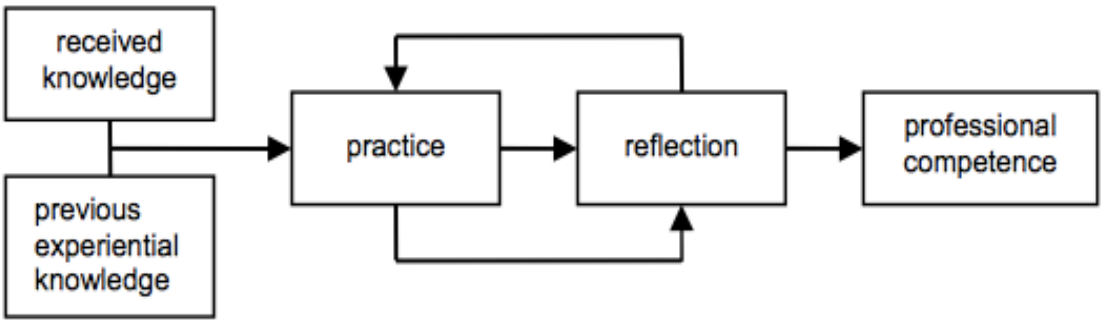
The findings of this study also have significant implications for teacher educators and policymakers. Above all, I would like to offer three suggestions for improving programs of teacher education in Korea. First, a new teacher-training model for an in-service teacher is necessary. In-service teachers should make an effort to acquire new theories and pedagogies, such as TBLT (Ellis, 2003; Nunan, 2004), CLT (Littlewood, 1981), CALL (Levy, 1997; Levy & Hubbard, 2005), and IDLE (Lee, 2017). For this, I strongly recommend carrying out three models for Teacher Professional Development (TPD) on a regular basis (Gaible & Burns, 2005): standardized, site-based, and self-directed models. First, the standardized TPD is meant to impart specific skills and information. This allows in-service teachers (or trainees) to rapidly obtain broad and useful knowledge and skills while interacting with other experts (or trainers). Second, site-based TPD helps to address the particular problems and practices that teachers experience in their own actual teaching contexts. Experts (or trainers) meet with teachers (or trainees) to plan classroom instruction or lesson planning based on their own particular actual classroom settings. Third, self-directed TPD is an autonomous, self-motivated method that allows teachers to take

more responsibility and depend less on external TPD, such as standardized and site-based TPD. Particular, these TPD models are significant and highly relevant to CALL as language teachers understand their concepts of technology innovation in both an informal educational environment (e.g., experiential learning with Facebook or Wikipedia) and formal situations (e.g., academic course) (Antoniadou, 2013; Kessler, 2007). As more and more in-service English teachers continue to engage in these TPD to learn and implement new pedagogy that tailors to their particular students, contexts, knowledge demands (e.g., having positive experiences with CALL in informal and formal environment or incorporating CALL into lesson plans), these TPD models can help bring out changes in curriculum and pedagogy for English education at K-12 and higher education levels (Kessler, 2007; Kim, 2005; So & Kang, 2014).

Additionally, it is of pivotal importance for pre-service English teacher educators in Korea to notice the large gap between pre-service teacher education programs (e.g., technology-integrated pedagogy) and actual classroom situations (e.g., inadequate technology resources). When designing curriculum and instruction, in other words, pre-service teacher educators should consider how their "programs can bridge this gap more effectively and thus better prepare novice teachers for the challenges they may face in the first years of teaching" (Farrell, 2012, p. 438). In this regard, recently, there has been a huge increase in the number of language teacher preparation programs worldwide that integrate a CALL component into the curriculum as a way to bridge the gap (see Dooly & Sadler, 2013; Kessler & Bikowski, 2011). However, I would also suggest that this CALL-embedded pre-service teacher courses should be integrated throughout in-service teacher education programs until novice teachers become comfortable enough applying CALL in their own classrooms. Merely introducing CALL-related pedagogical activities during the pre-service training period is far from enough. Pre-service (and novice)

language teachers should be capable of (and committed to) implementing CALL on their own after they have graduated from their respective teacher preparation programs.

**Figure 4. Wallace's (1991) Reflective model**




To make this happen, pre-service teacher trainers should teach prospective English teachers how to carry out ongoing reflective practices during their transitional period (at least for the first three years of a teaching career) in order to apply various theories, concepts, and methodologies (acquired from the teacher preparation program) in actual classroom contexts. To maximize its effect, Wallace's (1991) reflective model can be used. Specifically, as illustrated in Figure 4, Wallace's (1991, p. 15) model has three stages: pre-training, professional development, and professional competence. During the pre-training stage teachers begin their career with some pre-training knowledge about teaching (mainly learned from the college of education). The professional development stage is one in which teachers continuously reflect on their own teaching, based on pedagogical theory (acquired through "received knowledge" and "precious experiential knowledge"). This then leads to the final stage (or the ultimate goal of this model): professional competence. In light of this reflective model, pre-service English teachers should continue to engage in continuous reflective teaching about their own practices (e.g., applying CALL theory/pedagogy into practice) after they leave the teacher preparation programs. Therefore, teacher educators are responsible for not only including elements of CALL in present-

day language teacher preparation programs but also preparing these pre-service teachers to teach in classrooms with innovative pedagogical activities such as CALL without their supervision.

Further, teachers should be trained and educated to play a greater role as facilitators than as knowledge disseminators or authoritarians in the classroom. In other words, in this digital era, teachers need to reconsider what it means to "teach". As Jenkins, Purushotma, Weigel, Clinton, and Robison (2009) have pointed out, "Young people today learn digitally-mediated modes of expression largely from one another outside of school, and they engage with digital technologies in ways that are often more varied and more sophisticated than those they encountered at school." Therefore, both in- and pre-service teacher trainers should educate English teachers in Korea to play an appropriate role for today's young English learners. However, as Chun, Kern, and Smith (2016) have observed, English teachers must bear in mind that technology should not be viewed as "a panacea or a goal in and of itself, but rather as one means to support specific learning goals" (p. 76). Teachers as facilitators should critically assess learners' interests, abilities, resource affordances and a school's overall atmosphere for the purpose of incorporating technology into their teaching. For example, although the four individual students possess three digital devices, their engagement with IDLE activities outside of school took place in qualitatively different manners.

Taking all of above suggestions into account, how can we challenge the prevalent L2 teachers and teacher educators' belief that teachers are often the only source of target language (TL) and the classroom is the only place for practicing TL in the EFL contexts (Jeong, 2017; Lee, 2009)? In other words, in traditional higher education, 'didactic teaching' or 'transmission pedagogy' tends to be the focus. Language instructors and faculty members tend to disseminate declarative knowledge to students in a classroom, and students memorize this declared

knowledge. But its didactic, teacher-centered teaching approach has limitations in today's digital age in that 1) students may lose interest and motivation to learn; 2) they may not understand the content deeply; and 3) they may not successfully transfer the knowledge acquired from a decontextualized classroom to a real, authentic context (Lee & Hung, 2012). Hence, teacher trainers and policymakers should consider including IDLE-integrated pedagogy into teacher training programs, during which pre-service and in-service L2 teachers would learn to recognize and experience the positive effects of IDLE on L2 learning and teaching (Jeong, 2017). Consequently, those teachers who have the positive experience of using technology as a sound pedagogical approach are more likely to adopt it into their future teaching plans (ibid).

Additionally, for all educational stakeholders (e.g., policy-makers, administrators, teacher educators, teachers, and parents), the quantity and quality of IDLE should not be regarded as synonymous. When L2 learners spend massive amounts of time playing online games using the target language, these stakeholders should be cautious about interpreting it as resulting in affective learning or assuming that frequent engagement in IDLE activities can be conducive to L2 outcomes. Rather, it is important for stakeholders to help L2 learners make informed decision about which digital devices and resources students use, how much time they spend on IDLE activities, and which types of IDLE quality activities these students should engage in.

Before I conclude this session, realistically, I anticipate that a majority of ELT practitioners in Korea (especially seasoned teachers) may be reluctant to accept my radical ideas and suggestions. That is because they are neither confident nor familiar with this communicative-based pedagogy and CALL in the classroom based on previous studies (e.g., Jeong, 2017) as well as my own anecdotal experience. Several studies have shown that teachers' beliefs considerably affect the perception and decision-making of their practices in the classroom (Clark

& Peterson, 1986; Clark & Yinger, 1987; Li & Walsh, 2011; Ng & Farrell, 2003). In particular, the beliefs of English teachers play a central role in the classroom as the only source for a particular target language (Lee, 2009). Therefore, we should provide constant education and training to mitigate this lack of confidence and unfamiliarity with technology (and pedagogies) among experienced English teachers. If there is a change in their pedagogical beliefs, there will be a change in the classroom practice.

Another challenge we may face is a lack of school support for teacher professional development. A majority of teachers in Korea do not engage in professional development on their own. For instance, Lee (2009) has observed that nearly 90% of the in-service teachers are not familiar with reflective teaching (e.g., journal writing, portfolios, and classroom observation), which is considered a pivotal instrument for enhancing teaching skill. He also shows that English teachers in Korea find it difficult to engage in professional development because of schools' hierarchical atmosphere and style of administrative management. What is so alarming is that almost 95% of the English teachers in Korea spend most of their time in school carrying out non-teaching obligations, which prevents professional development. OECD (2009) also reported that nearly 75% of teachers in Korea do not sustain their professional development due to conflicts with wok schedules. The report also showed that around 75% of Korean teachers did not receive any financial support for their professional development from their school—the lowest proportion of all participating countries. My own anecdotal evidence also indicates that I was not any different from English teachers in Korea's regular schools: I worked as an English teacher in an EFL alternative school context (where curriculum and instruction are implemented independently of national mandates with its flexible, non-conventional school atmosphere) for four years. However, my school structure increased my stress and reduced my available time for

engaging in professional development and improving my own teaching practice. To resolve this issue, we in Korea need consistent support from our schools and colleagues to foster increased professional development for teachers.

Last but not least, the English education policy should keep reducing the negative washback effects of the Korean College Entrance Exam (e.g., norm-referenced format) and, more importantly, prevent this drastic measure from just being a short-term band-aid solution. That is because given the Korea's unique sociopolitical context, the ultimate curricular and pedagogical changes for secondary and higher English education may take a considerably long time. Kim (2006) argued that Korean high school students aspired to obtain high English scores on the national test due to the Korea's longstanding unique value system called *hakbul*, which is defined as "the conceptual stratification of society based on an individual's university degree" (p. 166). As a result, achieving high English proficiency level is essential in order to get admitted into the prestigious universities in Korea. And this *hakbul* orientation or 'educational credentialism' (p. 217), which have taken root in Korean society for centuries, has been a driving force for the enthusiasm for the top ranking university degree, and thereby this change may not happen overnight (Kim, 2010). Therefore, to really revamp the English education system in Korea, this macro-level educational policy (e.g., assessment tools, national curriculum) should be reformed consistently and coherently along with micro-level classroom applications and school support (Kim, 2010; So & Kang, 2014; Song, 2014). Then, this radical, large-scale transformation will slowly (but eventually) come to Korea.

### 5.4 Limitations of the Study and Recommendations for Future Research

This research has nine limitations. First, given that the participants were from similar socio-cultural backgrounds (Korean EFL university students), these results may not be

representative of the other EFL learners. Participants from different universities of other EFL countries would need to be recruited to substantiate the present results. Second, diverse backgrounds and in-class instruction conducted by the professors in the study (e.g., foreign vs. Korean faculty) might have affected the participants' IDLE activities. Future studies may need to take teacher factors into account to better capture these relationships.

Third, the study reveals only the existence of significant relationships between quality of IDLE and English learning outcomes, and was not able to delve deeper into the interaction between different types of IDLE quality activities (i.e., FFI and MFI) and English outcomes. It would be interesting to classify IDLE quality into four subcategories – i.e., 1) low FFI and low MFI, 2) low FFI and high MFI, 3) high FFI and low MFI, and 4) high FFI and high MFI – using the 2×2 matrix (Table 20), and compare the relative association of each category with English learning outcomes. Fourth, while the present study examined receptive/productive vocabulary levels, affective variables, standardized English test, and speaking as English learning outcomes, future research may merit exploring different language outcomes, such as reading and other aspects of communicative ability (e.g., English writing), which is scarce in the current literature (Sung et al., 2015).

**Table 20. 2×2 matrix between different types of IDLE quality and English outcomes**

| FFI / MFI | Low FFI | High FFI |
|---|---|---|
| Low MFI | (Low MFI, Low FFI) | (Low MFI, High FFI) |
| High MFI | (High MFI, Low FFI) | (High MFI, High FFI) |

Fifth, it seems difficult to compare findings across studies because the effects of IDLE activities on vocabulary have been measured with different types of vocabulary tests (e.g., Olsson & Sylvén, 2015). Therefore, future studies should use parallel types of vocabulary tests in order to make comparisons across studies. Sixth, although there were a number of different IDLE activities with which EFL students engaged, I could not provide more qualitative findings that illustrate how they practiced various IDLE activities (e.g., social networking sites, fandom, MOOC). In the future I will shed more light on what is actually happening in the digital wilds and provide more qualitative aspects of IDLE activities used by Korean EFL learners.

Seventh, L2 anxiety in a non-digital environment was not synonymous with that found in a digital environment, as identified by students Ju-no and Jin-young. Although I was able to qualitatively gauge L2 anxiety, future studies would consider measuring L2 anxiety in both contexts and investigating it in a quantitative manner. Eighth, students' psychological aspects of English levels (i.e., confidence, enjoyment, and anxiety) were obtained through single-item measures, although interview data largely made up for this limitation. For better comprehension of this phenomenon, more fine-grained instruments of these English learning outcomes are necessary in future studies. Finally, in order to help me to empirically substantiate claims about the effect of IDLE, an intervention study could be designed and implemented. That is, in the control group, teachers conduct general language learning in the classroom (a non-IDLE environment) while in Experimental Group A, I include a group of students that engage in IDLE quantity activities, and in Experiment Group B, groups of students who participate in IDLE quality activities are included. It would be of interest to examine whether this approach could be effective in developing students' L2 learning attitudes, behaviors and learning outcomes.

Nonetheless, the findings of this research offer a significant implication for L2 learners and several stakeholders in similar contexts. Almost a decade ago, Kramsch (2008) noted (pp. 405-406):

> Most institutions are still teaching standard national language according a 19th century modern view of language as a structural system with rules of grammatical and lexical usage, and rules of pragmatics reified to fit the image of a stereotyped Other. The 21st century is all about meaning, relations, creativity, subjectivity, historicity and the trans- as in translingual and transcultural competence. We should conceive of what we do in ways that are more appropriate to the demands of a global, decentered, multilingual and multicultural world, more suited to our uncertain and unpredictable times.

This statement is still true today for our fields in various ELT contexts. Given the critical role that IDLE play in enhancing English learning outcomes, as shown in the current study, ELT educators as L2 specialists should not underestimate their capacity for effecting change. More importantly, it is of the utmost significance to remind ourselves that we, as agents of change, should continue to cast a stone across the waters to create many ripples. Then, a radical, large-scale transformation may slowly (but eventually) wash across conventional TESOL pedagogy. I hope this study is but a small step toward creating many ripples among our fellow English researchers and practitioners and will encourage them to reconsider their various roles and pedagogical practices.

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## APPENDIX A: QUESTIONNAIRE

**Part 1: Demographic Information**

For each question below, please fill in the blank or choose the appropriate answer.

1. What is your name (Last Name / First Name)?

2. What is your gender?

(1) Male, (2) Female

3. How old are you?

4. What academic year are you in?

(1) Freshman, (2) Sophomore, (3) Junior, (4) Senior

5. What is your major?

(1) English Education

(2) English Literature

(3) The Humanities

(4) Engineering

(5) Science

(6) Others _____

6. How long have you been studying English?

(1) None

(2) Less than 3 years

(3) 3-5 years

(4) 6-7 years

(5) 8-9 years

(6) More than 10 years

7. If you have ever lived in English-speaking country, how long have you lived there?

(1) None

(2) Less than 3 years

(3) 3-5 years

(4) 6-7 years

(5) 8-9 years

(6) More than 10 years

8. How many digital devices are you possessing?

**Part 2. Confidence, Enjoyment, Anxiety and Standard English Test**

For each question below, please choose the appropriate answer.

1. How do you rate your affective variables in learning and/or using English?

| | Very Weak | | | | Very Strong |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| I feel confident in using English well | | | | | |
| I enjoy learning English | | | | | |
| I feel nervous about communicating in English | | | | | |

2. Please write your TOEIC score from tests taken within the past two years. _____

**Part 3. Frequency of IDLE Activities**

For a question below, please choose the appropriate answer.

1. On average, how many hours each day did you spend in engaging in IDLE activities outside the classroom in the past 6 months?

## APPENDIX B: INTERVIEW PROTOCOL

**Part 1: Confidence, Enjoyment, Anxiety, WTC, and Standard English Test**

1. Why do you want to learn English? What are your career plans?

2. Do you feel confident about using English well? When? Why?

3. Do you enjoy learning English? When? How? Why?

4. Tell me how you feel about communicating (speaking/writing) in English? Do you feel nervous/comfortable/confident? What other feelings do you experience? Do you feel different when communicating via technology?

5. Do you believe you are more willing to communicate (WTC) in English when engaging in IDLE activities? Why or why not? What variables affect your WTC?

6. What is your TOEIC score from tests taken within the past two years?

**Part 2: IDLE Activities**

7. On average during the past 6 months how many hours each day did you spend in engaging in IDLE activities outside the classroom?

8. Out of 100%, what percentage of your learning of English has come from formal instruction (e.g., school), and what percentage from IDLE activities (e.g., Internet, watching English movies, or other media)? How about your communicative skills?

9. Do you learn a lot in class or in the IDLE context? What did you learn?

10. What types of IDLE activities do you engage in? Can you describe how you engage in those? What factors affect the different types of IDLE activities you use?

## APPENDIX C: VOCABULARY TEST ITEMS

**Part 1: PVLT (University Word List)**

1. I've had my eyes tested and the optician says my vi___ is good.

2. The anom___ of his position is that he is the chairman of the committee, but isn't allowed to vote.

3. In their geography class, the children are doing a special pro___ on North America.

4. In a free country, people are not discriminated against on the basis of colour, age, or s___.

5. A true dem____ should ensure equal rights and opportunities for all citizens.

6. The drug was introduced after medical res____ indisputably proved its effectiveness.

7. These courses should be taken in seq____, not simultaneously.

8. Despite his physical condition, his int____ was unaffected.

9. Governments often cut budgets in times of financial cri____.

10. The job sounded interesting at first, but when he realized what it involved, his excitement sub____.

11. Research ind____ that men find it easier to give up smoking than women.

12. In a lecture, a lecturer does most of the talking. In a seminar, students are expected to partin____ the discussion.

13. The airport is far away. If you want to en____ that you catch your plane, you'll have to leave early.

14. It's difficult to ass____ a person's true knowledge by one or two tests.

15. The new manager's job was to res____ the company to its former profitability.

16. Even though the student didn't do well on the midterm exam, he got the highest mark on the fi____.

17. His decision to leave home was not well thought out. It was not based on rat____ considerations.

18. The challenging job required a strong, successful, and dyn____ candidate.

**Part 2: RVLT (University Word List)**

1. affluence

2. axis introduction of a new thing

3. episode one event in a series

4. innovation wealth

5. precision

6. tissue

1. deficiency

2. magnitude swinging from side to side

3. oscillation respect

4. prestige lack

5. sanction

6. specification

1. configuration

2. discourse shape

3. hypothesis speech

4. intersection theory

5. partisan

6. propensity

| | |
|---|---|
| 1. anonymous | |
| 2. indigenous | without the writer's name |
| 3. material | least possible amount |
| 4. minimum | native |
| 5. nutrient | |
| 6. modification | |

| | |
|---|---|
| 1. elementary | |
| 2. negative | of the beginning stage |
| 3. static | not moving or changing |
| 4. random | final, furthest |
| 5. reluctant | |
| 6. ultimate | |

| | |
|---|---|
| 1. coincide | |
| 2. coordinate | prevent people from doing something they want to do |
| 3. expel | add to |
| 4. frustrate | send out by force |
| 5. supplement | |
| 6. transfer | |

**APPENDIX D: SPEAKING SCORING RUBRICS (Modified TOEFL Speaking Rubrics)**

| | Near-Native (30 points) | Clear/Proficient (25 points) | Unclear/ Somewhat confusing (20 points) | Nearly unintelligible (15 points) |
|---|---|---|---|---|
| Delivery | | | | |
| Language Use | | | | |
| Topic Development | | | | |

*Note: Detailed speaking band descriptors can be found at:

https://www.ets.org/s/toefl/pdf/toefl_speaking_rubrics.pdf